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FROM

Clinton G. Ford

NOMISMA;

OR,

“LEGAL TENDER.”

BY

HENRI CERNUSCHI,

AUTHOR OF “BI-METALLIC MONEY.”

NEW YORK:

D. APPLETON AND COMPANY,
549 & 551 BROADWAY.

1877.

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Worthington C. Ford

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E V I D E N C E

BEFORE

THE UNITED STATES MONETARY COMMISSION.

WASHINGTON, *February 5, 1877.*

THE commission met at 1 p. m. Present: Senators Jones, of Nevada (chairman), Boutwell, and Bogy; and Representatives Willard and Bland.

HENRI CERNUSCHI called.

By the CHAIRMAN:

Question. State your name and occupation.—*Answer.* Henri Cernuschi. I was an LL. D. and a graduate at Pavia, Italy, in 1842. The political events of 1848 caused me to leave my native country, and I came to Paris, where I became a banker. In 1870 I retired from business.

Q. Where do you reside at present?—*A.* In Paris.

Q. Have you noticed the recent marked divergence in the relative value of gold and silver?—*A.* I have.

During several years I have been studying that matter. Before proceeding further, Mr. Chairman, if you will permit me, I would like to make a remark in connection with the purpose of my visit to this country. I want to declare that I have no mission at all from anybody, and that no government has charged me with the business of coming here and defending the interest of any country. In October last I received from you a communication which you had doubtless addressed to many people, inviting them to give in writing the evidence applied for in that inquiry. In response to your invitation I answered that, if agreeable to the commission, I preferred to come and give my evidence in person. You were kind enough to answer that, if I came, I would be welcome. I am very happy to visit again this great country, this free and *necessary* people. But let me repeat, that I am here only as a witness to give expression to my individual opinions, and not as an agent of any authority, governmental or otherwise.

Q. To what cause or causes do you attribute the great changes to which I have referred as having taken place in the relative value of the metals, gold and silver?—*A.* I would like, Mr. Chairman, if you will allow me, to give some general idea about money, because this is a question of theory; and without a preliminary statement of my monetary theory my answers to your questions would not be fully understood by the commission.

Q. I understand that, in order to make your answer to the question more intelligible, you desire to give a general idea of the nature and functions of money. You will proceed with your answer in that form which is most in accordance with your object.—*A.* I will give you my definition of money: *Money is a value created by law to be a scale of valuation and a valid tender for payments.*

This definition of money is one which embraces at the same time paper-money and metallic money. Paper-money certainly is an inferior money, and metallic money is a superior money; but they are both money, and that would be an incomplete definition which did not embrace them both. “*A value created by law.*” Certainly every one understands that, as regards paper-money, the value is created by law; but it is, perhaps, not easy for every one to admit that, with regard to metallic money also, the value is created by law. It is, however, the fact. If you suppose that gold is not money, is not legal tender—if you suppose that silver is not money, is not legal tender—the value of gold and the value of silver is lost. You have seen lately the effect of stopping the coinage of silver in Europe; but suppose that the coinage of silver is stopped everywhere; suppose that, after you have completed the coinage of the \$50,000,000 of fractional currency which you are at this moment coining, India would also stop the coinage of silver (as has been sug-

gested elsewhere), what would be the value of silver? What would be the situation of the miners? The silver-mines would be stopped. These mines can only work when they are sure of producing not simply a metal but a legal tender. And what I say of silver, I say in the same manner of gold. If England, France, Germany, and the United States renounced the use of gold money—if everywhere only silver money is adopted and gold money abandoned—all the gold will remain without value; all the shareholders of the gold-mines will be ruined, because the value of their shares depends upon the legal fact that the metal extracted is legal tender. I do not say that some of the mines will not remain open. I would illustrate my meaning by citing the probable consequence to follow with reference to the opium of India. If China should make a law forbidding the use of opium, or if great temperance societies whose object was to restrain the use of opium should become popular in China, what then would become of the poppy cultivated in India? The culture would be abandoned. Yet opium, nevertheless, would not disappear entirely. The opium of Smyrna, on the Mediterranean, would still be cultivated as a medicine. The same process of reasoning applies with reference to gold and silver. This fact, that money is a value created by law, is one of great importance, and I can cite you the highest authorities in proof that what I say is true.

Q. Supposing the gold and silver metals to have no other use than as money, would they then maintain the same value that they now maintain as money?—

A. There would be a diminution of their purchasing-power, because the purchasing-power of money is in direct proportion to the volume of money existing. If all gold and silver are used solely as money, all the ornaments and all the jewelry will be melted and coined, and the volume of money will be increased. It will be exactly as if a new mine of money had been opened. And the volume of circulating money being made larger than before, there will be a corresponding diminution in the purchasing-power of every metallic dollar.

Q. If there was no gold or silver in existence to-day except that which was in use as money, would that fact—the fact that there was no demand for either of the metals in the arts affect their value as money?—*A.* There is always the same phenomenon. The quantity of gold and silver circulating would remain the same as at present, and its purchasing-power would remain the same.

Q. Does the fact that there is a demand for both gold and silver for purposes other than those of money have any tendency to increase the value of the gold and silver used as money?—*A.* The employment of gold and silver in other ways than as money is a contraction of the monetary material; but the people who use this gold

and this silver in the way of ornament do never give for it more than the intrinsic—that is to say, more than the legal value, as regulated by the mint-law. If a miner assumes to sell the quantity of gold of which a dollar is made at a price higher than a dollar, the jeweler will take the metal he wants, from the general circulation, and make the ornaments with it.

Q. Does the fact that gold and silver are used largely in the arts, and otherwise than as money, tend to give those metals stability in value, and to cause the populations of the world to accept them as money more freely than they would otherwise accept them?—*A.* Generally speaking, I can say that the quantity of gold and silver, as employed in ornaments, is very small in comparison with the quantity of gold and silver which circulates as money. The true reason why gold and silver are good money is not because they are, as it is said, precious metals, but because the issue of that money is not in the hands of a government. When you have paper-money, you are never sure of the quantity of money to be issued. A country may be imprudent, and may be liable to great danger in the issue of paper-money. It may be at the mercy of a possibly bad administration. The issue of gold and silver is a natural, an automatic issue, which no one can control. It is independent of human agency; and it is for that reason that gold and silver are adopted by more than one country as money. And, then, the merit of metallic money

is, that it can be an international money. Yes, metallic money is issued by Nature, and that, being the fact, it can be an international money. Paper-money, being issued by man, has this great defect, that it is only a national money, which is incapable of being paid abroad. In the case of a war, it can be necessary for a country to issue paper-money. Necessity is the greatest law of human nature. Then, in issuing paper-money, you can dispose immediately, for military purchases abroad, of the metallic treasure previously outstanding. Mr. Chairman, the doctrine that money is a value created by law was promulgated twenty-two centuries ago. It was advanced by Aristotle, the great philosopher—so practical and so positive, that I would dare call him an American philosopher. I quote from his writings :

“ Money (*nomisma* in Greek) by itself is but a frivolity, a futility, a trifle, and has value only by law (*nomos* in Greek), and not by nature ; so that a change of convention between those who use it is sufficient to deprive it of all its value and power to satisfy all our wants.—(*Politica.*)

“ In virtue of a voluntary convention, money (*nomisma*) has become the medium of exchange. We say ‘*nomisma*,’ because it is not so by nature, but by law (*nomos*), and because it is in our power to change it and to render it useless.”—(*Ethica.*)

After Aristotle we have the Pandects of Justinian, the great source of all modern laws. The following is

from the Pandects, tenth book. The sentence converted in law by Justinian had been written at the beginning of the third century by the famous jurisconsult Julius Paulus.

"The origin of buying and selling began with exchange. Formerly money was unknown, and there existed no terms to differentiate merchandise and price, but every one, according to the wants of the time and circumstances, exchanged things useless to him against things which were useful, for it happens frequently that one is in need of what another has in excess. But as it seldom coincided that what one possessed the other wanted, and conversely, a material was 'elected' whose legal and perpetual value remedied, by its homogeneity, the difficulties of barter. This material being officially coined, circulates and holds its power, not so much from its substance as from its quantity ; since, then, each of the two things exchanged is no longer called merchandise, but only one, the other is called price."

So Justinian says that the power of money resides not in the *substance*, but in the *quantity*. The quantity is exactly that which Nature produces.

I have given a quotation from the Greek, and a quotation from the Latin ; I will now give an English quotation. It is from Locke (1695). Locke was a mono-metallic silver man, so to speak, as he considered that only silver is good money.

When Locke says "silver," he means "money."

"Silver is the instrument and measure of commerce in all the civilized and trading parts of the world.

"It is the instrument of commerce by its intrinsic value.

"The intrinsic value of silver, considered as money, is that estimate which common consent has placed on it, whereby it is made equivalent to all other things, and consequently is the universal barter or exchange, which men give and receive for other things they would purchase or part with, for a valuable consideration ; and thus, as the wise man tells us, money answers all things." ("Works of John Locke," vol. v., tenth edition ; London, 1801.)

The "common consent" of Locke is nothing but law. The silver mono-metallic law of Germany, before 1871, expressed the common consent ; and in this manner the bi-metallic law of France was the expression of the common consent.

Mr. WILLARD. In order that a point which has been suggested by the remarks of the witness may not be overlooked, I desire at this time, with the permission of the chairman and the other members of the committee, to put a question or two. I will, therefore, now ask this question :

Q. Do you wish to be understood as saying that the cost of the production of the precious metals has no

influence whatever upon their value?—*A.* I am very desirous of answering that question, because it is a great point of controversy between the economists. What is the influence of the cost of production upon the value of money? The cost of production goes for nothing in the value of money. If the purchasing-power of money depends upon the volume of money, it cannot depend upon the cost of production. If, as some think, the cost of production is manifest in the purchasing-power of money, we would possess some dollars which would have the faculty of purchasing more than could be purchased by some other dollars of the same metal. But all the money is the same, and is without regard to the cost of production. Certainly, if a mine is not producing as many dollars as the work upon it costs, this mine will stop, and cease to produce money; but the money not produced has no influence on the cost of production of the circulating money. I do not see how it is possible to find that the cost of production can dictate the value of money. If such were the case, the shareholders of the mines would never make a profit nor sustain a loss.

Q. Does the amount of the precious metals have any influence upon their value?—*A.* Certainly. The value of money depends upon its quantity. It is the same with gold as with greenbacks. If the stock in circulation is augmented, the purchasing-power of every greenback is diminished; and so with gold and silver.

The purchasing-power is always in relation to the quantity of the money.

Q. Then, since government does not regulate the quantity, and since value depends upon quantity, how can government be said to regulate the value of the precious metals?—*A.* I answer, that the legislator chooses, or “elects,” as Justinian says, the material which will be money. The material thus elected by the legislator can be gold, or can be silver, or can be both; but when the choice or election is made, the issue is not in the hand of the government. It is in the hand of Nature, and unlimited. All gold and silver produced are money; they are dollars, coming from underground. The legislator of England has had the right of making gold only money; the legislator of India has had the right of making silver only money; the legislator of France has had the right of making bi-metallic money; but when the choice is made, the government remains with folded hands, and has nothing to do with the quantity of money. There is the warrantee of the value of the metallic money, that nobody has the control of the quantity. But when the quantity is limited, as is the case in fractional currency, it happens necessarily that there is a diversity of value between the coined metal and the metal uncoined. A good and sound money is that money the coinage of which is unlimited, unrestrained; so that the value of bullion and the value of coin are always the same. It

is not the stamp on the coin which creates the monetary value ; that which creates the value is the legal right of every one of having all his metal stamped and coined in conformity with the law. I suppose I have answered the question, though whether satisfactorily to the committee, or otherwise, I am unable to say.

Q. Do I understand you correctly as saying that, in your opinion the value (by which I mean the purchasing-power) which government affixes to the precious metals is modified by their quantity as produced by Nature?—*A.* The government gives no value to the money. The government adopts a monetary unity—for instance—a dollar, weighing a certain number of grains in silver or gold. When we use the term “dollar,” we mean to say a certain quantity of metal which is received by the citizen in the one hand and given out by the other hand ; but the government does not interfere in determining the purchasing-power or the value of the dollar.

Q. Do you make a difference between “value” and “purchasing-power,” as you use the term?—*A.* I do not make any difference. The purchasing-power signifies the value of money.

Q. Would the purchasing-power of gold be affected, for instance, if silver was not used as money at all?—*A.* Certainly. The purchasing-power of gold would increase in a great scale. The value of gold has not increased after the demonetization of silver in Ger-

many, because the old silver is still circulating in all Europe. It has not been retired by circulation. The old thalers are still circulating in Germany; the old florins are still circulating in Holland; the old five-franc pieces are still circulating in France, Belgium, and Switzerland.

Q. Do you not think that gold has already increased in purchasing-power?—*A.* I do not believe it has, for the reason I have just stated. The price of silver has fallen in London; the price of gold has risen in Calcutta; but the prices of the commodities remain the same in India and in Europe.

Q. Has silver lost in purchasing-power?—*A.* In India silver has not lost its purchasing-power. The prices of all commodities in India have remained the same, except that the price of gold, which is a merchandise in India, has risen there. I know that in regard to that matter I am not in accord with the opinions of the Council of India; but I maintain that in India the prices have not increased. The purchasing-power of silver, which is the only money in India, is still the same; and the purchasing-power of gold in England is still the same as before.

In last September (as reported in the London *Times* of October 25th) the Council of India assumed that the crisis in the Anglo-Indian exchange was attributable not only to the stoppage of silver coinage in Europe, but also to a rise in the purchasing-power of gold in

England corresponding to a fall of the English prices, which are expressed in gold. The Council of India was mistaken. Neither did the English prices fall last summer, when silver was quoted in London 46*d.*, nor did they rise afterward when (this winter) silver was quoted 58*d.*

The exchange between London and Bombay, between English sovereigns and Indian rupees, is now strongly fluctuating every day; but I repeat, the prices of Europe have not been affected, the prices of India have not been affected.

The prices would only be affected and decrease in Europe if the demonetization of silver could be completed; that is to say, if all the thalers, all the gulden, and all the francs in silver were melted down; and, then, if all this silver was sent to India and coined in rupees, the prices would also be affected and increase in India.

Q. Inasmuch as in India gold purchases more of the commodities of trade than does silver, would you not say, since silver has not lost its purchasing-power, that gold had at least gained in purchasing-power?—A. Gold is not money in India—it is merchandise; just as silver is not money in England. Gold is dearer in India than before; silver is cheaper in England than before. There is no other phenomenon to remark.

Q. Your remark that gold has not increased in purchasing-power is intended to apply more especially to

countries that use the double standard, is it not?—*A.* My remark is intended to apply to all countries where gold is money, as well to England as to France.

Q. Have not the leading commodities used in England fallen in price within the last three years; and, if so, is not the same fact true of Germany?—*A.* I maintain that the prices are the same as before, and always for the same reason, that the demonetization of silver has not really taken place. When the demonetization would be realized, if possible, the prices will fall very much in Europe—in England, in Germany, in France.

Q. Then I understand you to say that, in your opinion, the revolution which the demonetization of silver would of necessity produce has not yet actually commenced in Europe?—*A.* Yes.

By Mr. BOUTWELL:

Q. In case the United States should resolve to adopt the bi-metallic standard at any proportion, say $15\frac{1}{2}$ to 1, and other countries should maintain their present position with reference to the issue of gold and silver respectively, what, in your opinion, would be the effect upon the business of this country?—*A.*

My desire is that a general agreement shall be adopted by the different nations. In my opinion, no country can coin silver alone; any country that coins only silver will remain alone, and will not have the money for paying abroad. If the United States coins silver and Europe coins gold, what can you do

with your silver? You cannot pay Europe. In that case it is far better to maintain your greenbacks and save to the Government the expense of retiring them. The situation of the miners is a very interesting one certainly, and if silver is adopted as international money, the law can be made favorable to the interest of the miners; but if silver is only money in this country, the Government will make a great mistake in buying that silver, or in contracting the paper-money [which costs the same], in view of making place for dollars to be coined with the silver bullion brought to the mint by individuals. It is better to maintain the paper-money (greenbacks) than to issue a national currency of silver, if the other nations do not use that metal as money.

Q. What, in your opinion, would be the effect of an agreement to use both metals in the United States, in Europe, and in India?—*A.* The effect would be that every variation, every perturbation in the relative value of gold and silver would be forever impossible. The quantity produced of the one or the other of the metals has nothing to do with the relative value of the two metals. The only cause which produces variation in the relative value of gold and silver is that which is shown in the laws of the different countries. I do not know whether the committee has sufficient time to allow me to make the reference, but I may say I can give historical proof, that any change in the relative

production of gold and silver has nothing to do with the relative value of the two metals.

Mr. WILLARD. I desire to ask whether the question put by the Senator from Massachusetts [Mr. Boutwell] was intended to include the consideration of the effect which would be produced by the remonetization of silver in the United States alone?

Mr. BOUTWELL. That was the question. I will now ask the witness this question: If silver and gold should be used throughout the United States, the Latin Union, Holland, and India, upon the same basis of relative values, what would be the effect?—*A.* I maintain that the effect would be to constitute a strong mass of money, composed of gold and silver, but without possibility of variation in value of the one against the other.

In connection with this subject of the relative value of gold and silver, I would call the attention of the committee to the edict of Medina, which is frequently referred to in treatises on money, issued by Isabella of Spain in the year 1497. The legal ratio between gold and silver coins was then established by Isabella and her advisers as one to ten and three-quarters. Some years prior to that the ratio had been different; it had been one to eleven and three-quarters. Now, all the writers upon this subject contend that the discovery of America brought so large a quantity of gold into Spain that the queen was obliged in 1497 to change the ratio

and undervalue gold ; but I have found, in the *Memorias de la Real Academia de Historia* of Madrid, that in the year 1475 the ratio had been just the same as the ratio which was enacted in 1497 by Queen Isabella. In 1475 Columbo was still in Europe, and it is impossible to attribute the ratio established in 1497 to the discovery of America. It was the restoration of a ratio existing twenty-two years before.

Here I beg to make another quotation from an American author. I refer to a letter written by Mr. John White, who in 1829 was Treasurer of the Bank of the United States, addressed to Mr. Ingham, Secretary of the Treasury. The letter is a very interesting one. It is as follows :

OFFICE BANK OF THE UNITED STATES
(JOHN WHITE, CASHIER),
BALTIMORE, November 16, 1829.

Upon a careful review, it appears to me that the following singular but instructive conclusions are evidently deducible :

Whatever degree of uncertainty may exist as to the precise quantity of the precious metals which was imported into Europe during the fifty-three years succeeding the discovery of America, the records of that time abundantly testify that gold constituted the chief part of the supply, and that, nevertheless, its great preponderance did not produce any sensible effect on the market-value, in reference to silver. It is evident that the enormous im-

portations of silver consequent upon the explorations of Potosí—which mine alone is estimated to have supplied one hundred and fifty millions of silver (in ten years subsequent to 1545)—did not vary the relative value of these metals by a rise in gold, as we find that Queen Elizabeth and her eminent advisers considered it expedient, in 1560, to reduce the standard proportions from $11\frac{1}{8}$ to a fraction under 11.

The discovery of the alluvial mines in Brazil in 1695 quadrupled the annual average amount of gold previously produced ; yet in 1717, when this inundation, as it may be termed, was at its height, the value of gold remained the same as in 1650—1 to 15.

Although it appears that the explorations of new mines, but especially of Biscaina, Sombreréte, Catorce, and Valenciana, in Mexico, toward the middle and latter half of the last century, increased to enormous amount, yet the market-value of silver was almost uniformly *higher* in England than in 1717.

These extraordinary circumstances in the history of the precious metals appear to invite and authorize the inference that it is impossible to affix with accuracy or utility the value of gold and silver by a comparison of the quantities produced.

You will observe that these statements (which will be found in the Senate documents of 1830) are of the greatest importance. Yet, if the variability in the relative production of silver and gold does not affect their

relative value, some reason must be found for explaining why the old ratio 1 to 10 and to 12 has risen gradually to 1 to $15\frac{1}{2}$, and why the gold coins relatively to the silver coins are now lighter than they were during the sixteenth and seventeenth centuries. It seems to me that the fact is due to certain mint regulations concerning the duties of seigniorage and brassage paid by individuals whose gold and silver were coined at the public mint. As these duties were levied rather with reference to the weight of the metals than to their legal value, the cost of coinage was less to the owners of gold than to owners of silver. For coining a million of dollars gold, the cost was much less than for coining a million of dollars silver. This difference in the cost of mintage gave certainly a preference to gold against silver. When a payment was to be made by one country to another, it was certainly more preferable to send gold than to send silver, because, in melting down the gold in order to obtain a new coin in a foreign country, the coinage expenses were much less than the expenses in melting down and recoining silver. When a country was so deprived of gold, its mint changed its ratio in favor of gold in order to induce the return of gold. Your law of 1834, raising the value of gold as against silver from 1:15 to 1:16, was enacted precisely with the aim of inviting the importation of gold, and furnishes an illustration of my meaning. When the mint of a country had so changed

the ratio between gold and silver in reducing the weight of the gold coins, the mints of the other countries followed the example; and these migrations of gold coins and reduction of their legal weight, being repeated many times, have had the effect of raising, step by step, the general mint-ratio from 1:12 to 1:15 $\frac{1}{2}$. Subsequently the rise has ceased, because of the duties of seigniorage and brassage having been considerably reduced, and then gold has lost the great advantage which the former mint regulations assured to it.

By Mr. BOUTWELL:

Q. Assuming that the production from the mines of gold and silver would vary relatively, would the use of these metals in all the countries named, upon a fixed relation, prevent any disturbance in those countries in the use of these metals?—*A.* That is precisely what I was about to refer to. The change in production would never produce any variation in the relative value of the two metals. Upon that point I will give a quotation from Isaac Newton, who was director of the mint in London in 1717. He was asked why the silver was always going abroad. Newton had compared the laws of the different countries, and he remarked that the law of France and the law of Germany were different from the law of England, and he suggested to change the ratio in England in order to maintain the circulation of silver in England. Newton says:

" And it appears by experience, as well as by reason, that silver flows from those places where its value is lowest in proportion to gold, as from Spain to all Europe, and from all Europe to the East Indies, China, and Japan; and that gold is most plentiful in those places in which its value is highest in proportion to silver, as in Spain and England. It is the demand for exportation which hath raised the price of exportable silver about 2*d.* or 3*d.* on the ounce above that of silver in coin, and hath thereby created a temptation to export or melt down the silver coin, rather than give 2*d.* or 3*d.* more for foreign silver ; and the demand for exportation arises from the higher price of silver in other places than in England, in proportion to gold—that is, from the higher price of gold in England than in other places, in proportion to silver—and therefore may be diminished by lowering the value of gold in proportion to silver."

And then he suggests :

" If gold in England, or silver in East India, could be brought down so low as to bear the same proportion to one another in both places, there would be here no greater demand for silver than for gold to be exported to India ; and if gold were lowered only so as to have the same proportion to the silver money in England which it hath to silver in the rest of Europe, there would be no temptation to export silver rather than gold to any part of Europe. And to compass this last, there seems nothing more requisite than to take off 10*d.* or 12*d.* from the guinea,

so that gold may bear the same proportion to the silver money in England which it ought to do by the course of trade and exchange in Europe ; but if only 6d. were taken off at present, it would diminish the temptation to export or melt down the silver coin, and, by the effects, would show hereafter better than can appear at present what further reduction would be most convenient for the public."

So you see that the voyage of gold or silver is not the result of the changing productiveness of the mines, but that it is dictated by the laws alone. If you establish in India your ratio of 1834—1 to 16—and introduce in England your ratio of 1792—1 to 15—you will see all the gold of England going to India and all the silver of India going to England. The relative value in the market between gold and silver is the result of a struggle between the laws of the different countries. If a treaty was made establishing everywhere the same relative weight between gold and silver coins, with everywhere a uniform charge for the coinage of the two metals, there would be no more reason for exporting the one than for exporting the other. The globe is round : if the mint-laws are the same in every nation, the exportation of gold or silver leaves no profit. "No more *temptation*," as was remarked by Isaac Newton.

And if the relative value of gold and silver has always been determined by the conflict of the several

legislations, how can we deny that, when the legislations will be everywhere and forever the same, the relative value of the metals will always remain the same?

To fix by law a relative value between sugar and coffee, between two perishable commodities, or between a legal tender and a commodity, would be a ridiculous attempt. But nothing is easier, nothing more rational and convenient, than to fix by law the relative value between two everlasting legal tenders, gold and silver. If it is admitted that law can fix the weight of the gold coins, how can we assume that law cannot fix simultaneously the weight of the gold coins and of the silver coins?

Q. Have you any knowledge of the state of public opinion or official policy in Europe that you can give to the committee, which will enable us to judge whether an effort to establish a uniform ratio for the coinage and use of silver and gold would be successful?—*A.* There is at present in Europe a great reaction in regard to the mono-metallic doctrine—a reaction almost as significant as that which prevails in the United States. I saw, the other day, a petition from the Chamber of Commerce of New York, addressed nearly a year ago to the Congress of the United States, asking for “a provision in order to promote an international convention for establishing the relative value of gold and silver.” This petition was signed, among others, by Mr.

Samuel Ruggles, the delegate of the United States at the monetary conference held in Paris in 1867. In that conference, on the 20th of June, Mr. Ruggles declared that "the people of the United States had sufficiently learned, if not by study, at least by experience, that the system of the double standard was not only without prudence, but also impossible, because this system implies necessarily a fixed ratio between the value of two different kinds of merchandise, gold and silver."

Now, the conversion of Mr. Ruggles to bi-metalism is so complete, frank, and sincere, that, in November last, he printed, for the use of the Chamber of Commerce of New York, a letter to the Director of the Mint of the United States, entitled "Vital necessity of preliminary international monetary conference for establishing the relative legal values of gold and silver coin." The opinion of Mr. Ruggles has changed; the public opinion in the United States has changed; and so, also, the public opinion in Europe is changing. In France the Government, the Bank of France, and the prominent bankers, among others M. Rothschild and M. d'Eichthal, are opposed to gold-mono-metalism. Some writers—M. Michel Chevalier, for instance—are still contending for the exclusion of silver, as they contended some twenty years ago for the exclusion of gold; but France sees clearly that the operation is impossible, and that the demonetization of the five

franc pieces would be for the public finances a terrible loss, to be computed by hundreds of millions. The *Journal des Débats*, which was mono-metallic, is now sustaining the bi-metallic system. The *République Française*, the journal of M. Gambetta, has always been against the demonetization of silver. Of the *Siècle*, in which my own writings appear, I need not speak. In Belgium the Government is bi-metallic, and M. Laveleye has reduced to silence all the mono-metalists. In Holland the public opinion is favorable (as it is in Austria) to the preservation of silver. A bi-metallic petition has been addressed to the king for the convocation of an international conference. M. Vrolich, formerly Minister of Finance, is the author of the petition. In Germany, also, many pamphlets have been published against the demonetization of silver; and if you reflect that the old silver thalers are still circulating with the enforced value of three gold marks per thaler, and that this proportion represents the ratio of 1 to $15\frac{1}{2}$ between gold and silver, you see immediately that for Germany nothing is easier than the adoption of bi-metalism. As bi-metalism would save to Germany all the loss resulting from the sale of her thalers, it is natural to believe that, if the United States recommends an international bi-metalism, Germany will not oppose any great resistance.

The chief champion of the German mono-metalists, Professor Soetbeer, of Göttingen, published a letter in

the *Neue Freie Presse* of Vienna, on the 10th of October last, in which he says:

"The views of the advocates of the double standard, and especially of Cernuschi, are, at least in one respect, not without justification.

"If all commercial states, without exception, in law and in practice adopt and maintain the bi-metallic standard at one ratio (say 1 to 15 $\frac{1}{2}$) for their entire coinage, with unconditional freedom of coinage of both metals, it cannot be denied that in such case, for the present, and probably for a long period to come, a permanent and stable relation between gold and silver would be secured."

In Spain, the legal ratio between gold and silver was fixed, some months ago, at 1 to 15 $\frac{1}{2}$ exactly. In England, also, the business community see very clearly how gold mono-metalism is pernicious. Since France stopped the coinage of silver, no par of exchange longer exists between England and Asia or between England and South America. The Chamber of Commerce of Liverpool has adopted a petition to the Parliament in favor of bi-metalism; and the president of that chamber, Mr. Samuel Smith, has published three letters of the greatest importance, in which he recommends the coinage of silver in England at the ratio of 15 $\frac{1}{2}$ with gold. Mr. Smith is a distinguished writer and a practical man. Another merchant, a prominent ship-owner of Liverpool, Mr. William-

son, of the firm of Balfour & Williamson, has published many able and persuasive pamphlets to the same effect. Mr. MacLeod, the author of "Theory and Practice of Banking," and Mr. Stanley Jevons, the author of "Money and the Mechanism of Exchange," who has been the director of the mint in Australia, have both written to me and to my friends, that from a scientific view the position of bi-metalism is impregnable. Before leaving for Cairo as director of the Egyptian railways, Major-General Marriott, formerly general secretary of the Bombay Government, author of "A Grammar of Political Economy," said to me that he was strongly in favor of bi-metalism, as well in England as in India and everywhere. In his excellent book, "Bullion and Foreign Exchanges," published many years ago, Mr. Ernest Seyd recommended the unlimited coinage of a silver piece of four shillings as legal tender in full. So it cannot be controverted that the public opinion of Europe in favor of the bi-metallic policy is increasing; and if the United States is disposed to promote an international conference, it is easy to foresee that, by general consent, silver will be rehabilitated.

If you will permit me, I will here explain how the mono-metallic campaign was begun. In 1867, when Mr. Ruggles was in Paris as your delegate in the monetary conference, that conference was almost unanimous in recommending the universal uniformity of coinage, taking the franc for a basis. There was a difficulty

with regard to England, as the pound sterling contained as much gold as is contained in twenty-five francs and twenty-two centimes, and for obtaining the proposed uniformity of coinage it was necessary to reduce the weight of the sovereign to the exact weight of twenty-five francs. The Chancellor of the Exchequer, Hon. Robert Lowe, favored the reduction, and spoke in its behalf in the House of Commons. I quote his language:

“The French Government have put themselves into communication with us. They have written to me on the subject of international coinage, and wish to know what steps the Government of England are willing to take in the matter. In my answer, I ventured to say that, under any circumstances, we could not have any hope of establishing an international coinage with a country that has two standards. France has a gold and a silver standard, and it would be impossible to hold out hopes of assimilation until France made up her mind to give up the silver standard, and have only a gold standard; and I am happy to say that France is favorable to the abandonment of her silver standard, as I gather from the report of a commission on the subject which I have received.”

You see by this speech that the idea of demonetizing silver has arisen from the desire of introducing everywhere the franc system—a desire which, after the subsequent adoption of the mark in Germany, is no longer entertained.

The speech of Hon. Robert Lowe was made on August 6, 1869; and when, in 1871, after the war, Germany took her position with reference to the proscription of silver, there was an excuse for it, because Germany knew that in France there was a party desiring to introduce gold mono-metalism; and, after her victory, she preferred to take the advance. But afterward public opinion, as I have said, changed as well in France as in Germany.

Mr. BOGY. I wish to ask the witness a question, not exactly in the line of his argument, but one which, I think, is pertinent to the inquiry of the committee: What was the influence in 1816 which brought England to the idea of a single standard, and why does she now maintain it with so much pertinacity?

The WITNESS. An erroneous view. The original author of the error was Lord Liverpool, in his letter to the king in 1805. His son introduced the error into the law of 1816. Yet, at that time, the adoption of gold mono-metalism was for England an easy operation. There was no silver in England, and England has never sold an ounce of silver. Many English mono-metalists whom I met in England stated to me: "Only one metal can be money; we cannot have two measures of value." "Why not?" I inquired; "you have two pounds—the pound troy and the pound avoirdupois; a thermometer can present simultaneously two different

scales—a scale Fahrenheit and a scale Réaumur—without derangement.”

At the present moment the London *Economist* is desirous that the United States should coin a great quantity of silver, and that France should recoin the five-franc pieces. “Well,” I said to the editor of the *Economist*, “how is it that, after having preached to all nations for many years that gold mono-metalism is the best money, to-day you recommend silver to the other nations, and persist in recommending only gold to England? If mono-metalism is good in itself, it is good for the other nations as well as for you. If bi-metalism is bad for you, it is also bad for the others. For my part, I consider bi-metalism good and necessary for all nations—for England as for others; and it is for that reason that I am working for the general adoption of bi-metalism.”

Mr. Bagehot, the editor of the *Economist*, is a man of great scientific and literary attainments, but he has never answered to my dilemma. Still, I do not despair of the *Economist*. That paper knows very well that at certain moments a great change may be necessary in the economical policy of the country. It cannot bring itself to despise the example of Robert Peel, who became the leader of his enemies in accepting the principle of the free corn-trade.

Mr. BLAND. Supposing that one-half of the commercial world was to use silver and the other half to use

gold, would not that be the same in effect as the adoption of the double standard ?

The WITNESS. Bi-metalism does not consist in the independent use of the two metals as money. It requires that the two metals should be used everywhere at a fixed ratio by law. If one-half of the nations are paying in gold and one-half are paying in silver, they are just in the bad position in which England and India now are—without par of exchange.

Mr. BOGY. Supposing that in this country we restore our relation at 16 to 1, while in France and Europe generally it would remain at $15\frac{1}{2}$ to 1, what would be the effect upon this country, and what would be the effect upon Europe ?

The WITNESS. If you coin at the ratio of 16, France cannot coin at the ratio of $15\frac{1}{2}$. Remember the experience of 1834. What has been the effect of the ratio 16 then established ? The effect has been that no silver dollars have been coined in the United States since 1834, because there was a profit of three per cent. in sending silver to France. France knows that if she coins silver at $15\frac{1}{2}$, all the German and American silver would be presented to the French mint ; that not an ounce of silver would be coined here. Then, if you coin at 16, you remain alone ; and it were better to maintain the greenbacks than to coin silver, if this metal is not also coined in Europe.

By Mr. BOGY:

Q. By retaining 16 here and $15\frac{1}{2}$ there, our silver would, of course, go right to France. Would not that compel France to abandon the bi-metallic system?—*A.* The policy of France would be not to coin, but to wait. France committed a great mistake when, in 1874, after the example given by Belgium, she limited the coinage of silver. This has been a great mistake. If France had continued to coin silver freely, the German silver would have flowed into France, and some gold of France would have flowed into Germany, but silver would have maintained everywhere its value relatively to gold. In limiting the mintage, a difference has been created between the value of bullion and the value of coin.

By the CHAIRMAN:

Q. If it was a mistake on the part of France and the Latin Union to limit the coinage in 1874, when they could readily have absorbed whatever of silver Germany had to dispose of without seriously affecting their trade, would it not be an ample guarantee for the stability of silver if the United States should resume specie payments and adopt the relation of $15\frac{1}{2}$ to 1 (the same which the Latin Union have adopted), without reference to any of the gold-using countries?—*A.* Certainly. If the United States adopt the bi-metalism at this same ratio, $15\frac{1}{2}$ to 1, the effect would be very

good for the restoration and the maintenance of the relative value of the two metals.

Q. Would it be necessary, for the maintenance of such relative value between the two metals, that all the countries establishing that relation should join in a convention?—*A.* I do not say that it is necessary to have all the countries, but it would be sufficient to obtain the concurrence of some leading countries of Europe, and, if possible, of India.

Q. If the United States should wait until all the nations of Europe, or the major part of them, had joined in a law establishing the same relation between gold and silver as has been established by the Latin Union, would not the United States find it much more difficult to get a sufficiency of the money-metals, gold and silver, with which to resume specie payments, than she would to start out now without reference to other nations?—*A.* If the United States were a gold-paying country and desirous to change its money into bi-metalism, the operation would be pretty easy; but you are not in that situation. The United States has three difficulties or three problems which are to be solved simultaneously. You have the bondholders question, you have the resumption question, and you have the silver question; and it is impossible to give a good solution of one of the three without giving a satisfactory solution of the two others. As to the question of the bondholders first: Here I am entirely of the opinion that the

United States have the right of paying the bondholders in silver. I have with me here a bond of the United States, one of the last issue, a four-and-a-half per cent. bond. Upon that bond it is expressed that the same will be paid at home, in coin of the United States, in the bi-metallic standard existing in July, 1870. The bi-metallic standard of 1870 is that of 1834, 1 to 16. But the legislator has the right of changing the standard. This is a superior right, an inalienable right, and every nation has used this right as well in modern as in olden times. England, which is now mono-metallic, has been bi-metallic. Germany decided, in 1871, to change the silver standard into the gold standard. Holland, in 1849, changed the gold standard into a silver standard. France, which had a bi-metallic currency at the rate of 1 to 15 before 1785, changed that ratio in that year, adopting 1 to 15 $\frac{1}{2}$. The United States did the same in 1834, when she changed the ratio of 1792, "1 to 15," into the ratio "1 to 16."

So, then, you have the right of paying the bondholders in silver as well as in gold, and the supreme right of changing the ratio between the weight of gold and silver dollars. But if you do so, and if silver is not restored in Europe, how can you sell bonds in Europe? Who in Europe will buy silver bonds if silver is refused at the European mints? And without selling bonds how can you procure the \$300,000,000 of metal which are a

necessary minimum without which the specie resumption cannot be imposed upon the national banks? On the other hand, if gold mono-metalism is maintained in the United States, where will you find all the gold which is necessary for resuming specie payments? There are only three stocks of gold in Europe: two old stocks, Paris and London, and a new stock, Berlin. The formation of this new stock renders still more difficult for you the resumption exclusively in gold. The United States can only resume after having here in their hands a great stock of gold and a great stock of silver, the two being legal tender.

By Mr. BOGY:

Q. You are aware that we have in this country \$700,000,000 of paper-money to redeem?—*A.* When you have redeemed the greenbacks—that the Government is pledged to do—the \$360,000,000 of bank-notes are a debt of the banks.

Q. What becomes of that paper?—*A.* That paper takes a place equivalent to that of the English bank-notes. Instead of having a central bank as they have in England, which issues promissory bank-notes in greater quantity than the bullion she possesses in her vaults, you will have your thousands of national banks with bank-notes redeemable in specie at sight.

Q. Where will they get the money with which to redeem them?—*A.* If you have obtained \$300,000,000 of gold from Europe, and if you recoin silver dollars,

the greenbacks become certificates of deposit, and the banks can reimburse their notes with greenbacks or in metal.

Q. Supposing we are alone—that is, supposing England and France refused to be in accord with us, and we introduce bi-metalism into this country, and Germany attempts to force her silver upon us at a low price—would our country be injured very materially ? I understand that France cannot coin because she is too near a neighbor to Germany. Therefore, letting France and the Latin Union remain as they are now, and Germany and England remain as they are now, with a single standard, we start here bi-metalism and coin, I ask, Where would the injury come to us as a nation ?—*A.* The injury would be that at the first moment all your gold would disappear.

Q. But no gold would go abroad unless it went to pay a debt abroad.—*A.* I beg pardon. Germany will send her thalers to your market and buy drafts on London ; that is to say, gold payable by Americans.

By the CHAIRMAN :

Q. That would be to pay a debt. But if we lost a dollar in gold we would receive an equivalent in money ; the country would not be impoverished ; we would only lose a dollar in gold and the foreign country would lose a dollar in silver.—*A.* At a certain moment, when there would be a balance in favor of England, how could you pay England if you have no gold ? You

could not pay England except by sustaining heavy losses in selling your silver dollars as merchandise on the London market. A common money is necessary for paying the balances between two countries.

Mr. BOGY. I agree with you that our coupons are only payable at home, but they may be payable in letters of exchange, so far as foreign bondholders are concerned. Suppose that you, a bondholder, are in Paris, and you want \$10,000, you can get it as well there as at home. That would be a home-purchase. We do not send silver and gold in kegs; we pay it in our operations.

The WITNESS. The bank operations are easy when the money is the same between the two countries; but if you have only silver for money and Europe has only gold, you remain in the situation of India.

By the CHAIRMAN:

Q. What is the effect upon the country of a balance of trade being in its favor or against it? If a man who buys, pays for what he buys in that medium which he contracts to pay, what difference is it to him whether he pays gold, or silver, or tin, or anything else? Is not that a matter entirely with the importing merchants of a country?—A. This is a supposition which involves the abandonment of the invention of money between nation and nation. It supposes also the suppression of money between individuals and a return to barter. If barter is the better thing, let us suppress the word

"price," the word "buyer," the word "seller," the word "payment," which words were invented with the invention of money: I hold that bi-metallic money is the best, because it is the most international. If we believe that it is possible to make payments between one country and another without a common money, then in that case it is useless to be bi-metallic.

Q. Is not the trade between all countries, except those of the Latin Union, by barter?—*A.* Certainly, the nations do not trade for exchanging money between them—they exchange merchandise; but the exchange of merchandise by the medium of money is, without comparison, preferable to the exchange without that medium, or to barter. Money has been invented precisely because barter was an imperfect and costly mode of exchange, as is so well explained in the paragraph which I read to you from the Pandects of Justinian.

Q. Is not the fact that there is no common money between the nations due to the fact that many of them use neither gold nor silver, but paper-money?—*A.* Certainly. The American greenback, for instance, is not a common money with Europe.

Q. Neither is the ruble of Russia, nor the paper-money of Italy and other countries.—*A.* No, sir. The paper-money-paying country has no common money. Wherever a country has a paper-money, the best men of that country are desirous of resuming specie

payment, because paper-money is an inferior money, and is without internationality.

Q. Admitting as correct the theory that the value of the money of a country is regulated by its volume, and that that volume should at all times be kept as nearly equal in amount as possible, on account of the internal transactions being vastly greater than could be any external transactions, then (while, perhaps, you have an advantage in having a money which you can send abroad in large amounts to settle foreign balances) do you not create in the supply at home an inconvenience which more than counterbalances that advantage, by reason of this continual importation and exportation of money ?—*A.* There are conditions at times when a great quantity of money is going out of a country; that is true. The best machine is exposed to some inconveniences, but that is not a good reason for repudiating the machine. The pocket-watch and the locomotive are liable to derangement from trivial causes, but mankind will not therefore relinquish the use of the watch and the locomotive. When a large quantity of metallic money is exported from a country, the bankers there are working to reestablish the equilibrium. They export bonds of the funded debts or securities issued by the railway companies and others. Between England and France the equilibrium is always restored in this manner. My proposition is still the same: If you are without a common money with

Europe, it is useless for the United States to attempt to resume specie payments, and it is a useless expense for your Government to redeem the greenbacks by opening the mint to the coinage of silver dollars.

By Mr. BOGY:

Q. But, Mr. Cernuschi, you stated—and stated very correctly, I think—that we cannot resume specie payments in this country unless we have three hundred millions of gold; that, as the gold was principally in three places, London, Paris, and Berlin, we could not obtain that quantity; therefore we could not resume upon the same standard alone, and it became a necessity to introduce silver coin—in all of which we agree with you. But you also say that this cannot be done unless bi-metalism becomes universal, and includes Germany also?—*A.* I made an exception—that of the Latin Union, with Holland, and, possibly, India.

Q. Aside, then, from those exceptions, do you not see, according to your statement, that that cannot be done? We are required to resume in January, 1879. We are now in 1877, and have less than two years in which to prepare for resumption.—*A.* It is very difficult, I admit.

Q. It could not be done at all, because, were a congress of delegates to meet here or in Europe, it would be in session some time, the deliberations of those bodies not being ordinarily conducted very rapidly; and it would be fully next year before the matter could be

determined by the nations to be affected by the arrangement. If, then, we were to wait until that time, it would be too late to use silver. That is one objection to your argument. Another objection is, that, although the Latin Union may agree with us in introducing bi-metalism, France could not coin, because there stands Europe with a large quantity of silver.—A. I will answer. The House of Representatives rejected, in January last, the idea of an international congress, fearing that the international congress was proposed as a dilatory measure prejudicial to the restoration of silver. The House of Representatives had voted, in December, a bill for the restoration of silver at the ratio of 1834, 1 to 16. Now, it is believed that the Senate is hostile to the bill, and so the Forty-fourth Congress will be closed without advancing the solution of the silver question. If the House had voted in favor of the international congress proposed by the Senate, the diplomatic conference could have been convened for this summer, and some days only would have been sufficient for reaching a conclusion. In case of the refusal of Germany to adopt bi-metalism, it would have been possible for France and the United States to buy directly and together, at a certain price, all the German silver, and so put a term at once and forever to all uncertainty in the value of silver in London.

By the CHAIRMAN:

Q. Why not adopt bi-metalism in France, and let

Germany do as she pleases?—*A.* Because, in that case, all the silver would come to France.

Q. In your opinion, would the effect of having all the silver go to France be an injury to the United States?—would not France be at liberty to send it right over to the United States?—*A.* I do not say that the absorption of the German silver by France would be injurious to the United States. But it is not probable that France would, without some prior agreement with you, consent to absorb all the German silver and to pay it in gold at $15\frac{1}{2}$, for the sole purpose of making an operation agreeable to you.

Q. Suppose that France keeps her mints shut, as they are now, and remains as she is, while the United States adopts the bi-metallic system, with the relation the same as that which the Latin Union has now established—Germany is prohibited from sending her silver to France, and the United States boldly adopts the relation of $15\frac{1}{2}$ to 1—I ask, what harm could come to the United States in such a condition of things?—*A.* This silver which would come from Germany here should have the effect of driving out all the gold.

Q. From where?—*A.* From here.

Q. How is it that we have now two currencies—greenbacks and gold—and yet the greenbacks do not drive out all the gold?—*A.* You are not entirely a paper-money country. Your customs duties are to be paid in gold, and it is for that reason that all your gold

has not been exported. But if you adopt bi-metalism, you are under the necessity of declaring that the silver dollar is a valid tender, as is the gold dollar, for all payments, also for the customs duties ; and then all your gold will be exported, and the silver thalers will be sent from Germany to your mint and expel all your gold dollars.

Q. But here are three hundred and odd millions of paper legal tenders in this country—legal tenders the same as gold is a legal tender—yet the holders of that legal tender cannot deprive us of our gold ?—*A.* The holders of paper legal tender cannot deprive you of the gold which is employed for the payment of the customs duties. Paper legal tender cannot be imported to be changed for gold. But, as I have explained, this exportation of gold is inevitable if you establish bi-metalism, Europe remaining gold-mono-metallic.

Q. In the presence of the great demand caused by the wants of this country for the purposes of resumption, how long, do you suppose, would silver remain at a discount, as compared with gold ?—*A.* The silver can remain at a discount forever. But this is not the worst ; the worst is, that no fixity would ever be possible between the value of gold and the value of silver. If you are bi-metallic when Europe is gold-mono-metallic, you are bi-metallic only by name : verily, you would be a silver-mono-metallic country, such as India ;

and the monetary position of the United States against Europe would be exactly the same as is the present position of India against England—a position which engenders heavy losses to both countries.

Q. Taking into consideration that the little demand that we made for forty or fifty millions has put silver up from 50 or 52 to 58½ pence, would not the demand for silver for the purposes of resumption, in the presence of any supply that we could find in the Western world, be likely to put up the price so that it would maintain a parity with gold at fifteen and a half?—*A.* The demand can only be made in offering gold, or bonds payable in gold, if Europe refuses to coin silver. In this manner it is impossible to create a par of exchange between the two metals. I speak as a man of theory and a man of practice, and I am a sincere friend of the United States. If I speak unfavorably of the possibility of the success of your scheme, it is not with the desire that it may be unsuccessful. But in conscience I am obliged to declare, at this time that in this country the resumption exclusively in gold is impossible, and that the resumption with bi-metalism is extremely dangerous if Europe continue to maintain gold-mono-metalism.

Q. Suppose that we made no issue of bonds whatever, but that the Government simply retired its legal tenders—took away from them their legal-tender functions?—*A.* For retiring the greenbacks it is necessary

to borrow or tax the people to a great extent. There is a debt, without interest, of \$300,000,000. You cannot pay a debt with nothing. For retiring the greenbacks you are obliged to spend \$300,000,000.

Mr. BOGY. Of something?

The WITNESS. Of something.

By the CHAIRMAN:

Q. Considering, then, that in this country the greenbacks are within five or six per cent. as valuable as gold, how much contraction, do you think, would be necessary to bring them up to a parity with gold?—A. Do you speak of the possibility of arriving at the parity between gold and greenbacks? That may arrive, I cannot say at what moment. It is possible. But if you make your plan of resumption on this basis of the parity between gold and greenbacks, your basis is very feeble and precarious. With the first commercial storm, the national banks would be in the greatest embarrassment to pay in metal the bank-notes presented for reimbursement. Then a "run" on the banks, and their failure.

Q. Would not your apprehensions of the inability of this country alone to adopt the bi-metallic system, leaving the Latin Union and France to occupy the position which they now occupy, be entirely modified, if not dissipated, in the presence of the fact that but a small amount of silver is available in Europe outside of the Latin Union, for purposes of sale to this country?—A. Germany has the only stock. There is no stock

of silver anywhere in the European market, because the silver still goes to India.

Q. Then, if there is such a small supply on hand, and the United States needs such a large amount of money-metal, would not silver rise to a parity with gold when the demand for it was made by the United States?

—*A.* You begin by issuing in Europe bonds to be paid for in silver. The bill passed by the House declared that they should be payable in silver. Nobody in Europe will buy these bonds payable, interest and principal, in a metal which is not coined in Europe.

Q. Suppose we should issue bonds payable in gold, and buy the silver at such prices as we could get it for when it is low, and before a great demand is made for it in other countries? —*A.* But if you issue bonds payable in gold dollars, you cannot be bi-metallic. Whenever you arrive at that conclusion, you make a distinction between gold dollars and silver dollars. If you contract obligations in gold dollars, you declare that the gold dollar is better than the silver dollar, and in that case silver will never be restored to the same rank with gold.

Q. If we stand in the presence of great nations like Germany and China, who cannot have the double standard, and when we see another great country like England, whose ancient prejudices or reasons, whatever they may be, will not allow her to consent in our time or in the near future to the adoption of bi-metalism,

must we forego the advantages which bi-metalism offers until these nations can grow up to that position in which they can adopt it, or until their prejudices can be overcome?—*A.* It requires great audacity.

Q. Then I ask you whether, if it requires more audacity than was required on the part of France when, singly and alone, she boldly took the step, and, without a union with any other country, succeeded in maintaining the variation intact and to her own great advantage for sixty-five or seventy years—I ask whether at this time, when we have the assistance of France, when we have the Latin Union formed, and have a knowledge concerning money much in advance of that which obtained when France formed the relation, we cannot adopt it with much more assurance of success than had France at the time of her adoption of it?—*A.* But France was not then in the presence of a country demonetizing silver. She had not to restore silver and to invent bi-metalism. Silver was the principal money in Europe. France acted with her forces, and she had not to fight against the forces of the others.

By Mr. BOGY:

Q. I understand that the price of silver bullion in London is now fifty-eight and a fraction?—*A.* It is. This price of London is now made by the price paid here by the Secretary of the Treasury in buying silver for coining fractional currency. I admit that, if you coin a great quantity of fractional currency, silver will

obtain a good price, but it will be at your expense. When the coinage of your fractional currency will be completed, the silver bullion will fall to what it was before, and you will see, too late, that to buy so great a quantity of silver for coining *tokens* is a bad operation, an unjust concession made to the silver-men—a concession made, perhaps, in the hope of deferring indefinitely by that means the unrestricted coinage of silver as legal tender in full. In every case, what we want is not a rise in the value of silver, but fixity. We want a par of exchange between gold and silver, that is to say, a common money between Europe, America, and Asia. This par of exchange is impossible without the intervention of the legislators in establishing in the principal countries the same legal ratio between the weight of gold coins and the weight of silver coins.

TUESDAY, February 6, 1877.

Present, Senators Jones, of Nevada, chairman, and Bogy, and Representatives Willard, Gibson, and Bland.

HENRI CERNUSCHI—resumed.

By the CHAIRMAN :

Question. Permit me to repeat the question which I asked you yesterday : To what cause or causes do you attribute the recent changes in the relative value of gold and silver ?—*Answer.* I attribute the crisis of silver to

one and a single cause—the German law of 1871. I know that other causes have been adduced—that is to say, the discovery of new silver-mines of great richness in the State of Nevada, the decreased demand for silver for export to India, and the legal limitation of silver coinage by the Latin Union. Certainly, these events have aggravated the situation of silver. But if the German law had not appeared, the Latin Union would not have limited the coinage of silver, the new silver of Nevada would not have reduced the value of silver, just as the more extraordinary production of gold in California and Australia some twenty-five years ago did not reduce the value of gold. The par of exchange between silver rupees and gold sovereigns being guaranteed by the permanent action of the French bi-metallic law, the decreased exportation of silver to India would have been without effect on the value of silver as compared with the value of gold.

Q. Is it your opinion that the low price per ounce in gold which silver reached in 1876 was attributable to the panic occasioned by exaggerated reports of the productiveness of the American mines, and exaggerated estimates of the amount of silver which Germany had to dispose of?—*A.* It is very difficult to estimate as to how much influence the panic has had on the price of silver in London. For my part, I am led to think that the depreciation was simply the result of the natural prices stipulated in the public market; and I believe

that, if subsequent circumstances had not determined a rise, the price of silver would have remained at the level which has been called "the panic level." There is one fact or two which I would here mention: first, the influence of the Chinese law, which makes silver the sole legal tender. Europe, having bought this year a great quantity of silk in China (our crop having failed), has been obliged to send to China a greater quantity of silver than is usually sent. Secondly, the American Legislature, which has decreed the purchase of silver for the coinage of \$50,000,000 fractional currency, has forced a rise in the price of that metal. When this \$50,000,000 shall have been coined, and if next year the crop of silk is abundant in Europe, the price of silver in London will very probably fall; and it will be impossible to attribute the phenomenon to the panic.

Q. I believe that you stated yesterday, in answer to a question, that the prices in a country depended upon the volume of money in such country. Now, taking into consideration these facts, that all the mints in Europe are closed to silver, but that there are countries in which it can find a market (viz., South America, the East Indies, and Asia), would there not be, even without exceptional conditions, such as a failure of crops, a tendency to a steady rise in prices in such countries? Moreover, does not the cheapening of the money-metal of any country tend largely to the encouragement of

exports from such country and the discouragement of imports into such country, and thus automatically bring about that rise in the value of the money-metal to which you refer as being occasioned by the increased commerce with China and the Indies and the coining of subsidiary coins by the United States?—*A.* Supposing that the demonetization of silver in Europe be complete, and that the old coins of Europe, except the limited fractional currency, would be sent to Asia; supposing also that all the new silver produced annually would be sent to Asia (which suppositions would be the natural consequences of the practice of gold monometalism in Europe and the United States), certainly the value of silver would decrease in Asia, and consequently the Asiatic prices stipulated in silver would increase. I do not see how this change in the Asiatic prices stipulated in silver could augment the exportation of the Asiatic articles and their consumption in Europe. But that which is sure is this, that Europe will no more have silver for the purpose of paying it to Asia, and that the monetary relations between the two halves of mankind would be impossible. It is for that reason that I advocate with so great persistence universal bi-metalism.

Q. Under the circumstances which you depict, would not the silver product of the mines of the Western world furnish the Western world in the future, as it has always in the past, with the money-metal with

which to transact its exchanges with the East?—*A.* The new silver of the Western country will necessarily go to Asia, the only country where it would be money; but when Asia will have something to pay in Europe, it will be impossible for her to send her silver, this metal being no longer, upon our hypothesis, money in Europe. An example of this we have seen in 1876, between India and England: India having to pay fifteen millions of sterling gold per year to England, she had not, as before, the possibility of sending silver to France, where this metal was formerly coined; and the Government of India was losing 20 per cent. on banking exchange between India and London. So that the Government of India declared that famine, war, and drought, are for India lesser evils than is the depression of silver in London—that is to say, the great increase in the price of gold in India.

Q. Is it not a fact that no nation, for any great length of time, can buy more than it sells, and that, except for the immediate settlement of temporary balances, the great bulk of trade between the two countries must be by barter of commodities, the price being regulated by money?—*A.* Barter as between individuals was abolished between the nations many thousand years ago. The invention of money has had the effect of facilitating the exchanges of all the commodities, and certainly money is not consumed. But I cannot admit that we call barter the exchange of commodities be-

tween nations, since all these exchanges are regulated in money. We do not exchange silk for cotton, but we sell or buy the one as well as the other by the medium of money.

Q. I will ask you if, in the operation of buying and selling between nations by means of money, money is not used as an instrument of valuation rather than as a medium of exchange?—*A.* Please read the definition of money which I gave yesterday: “Money is at the same time a scale of valuation and a valid tender for payments.” Without money there can be no sales, no purchases, no prices, no payments, but only tedious and expensive barter.

By Mr. WILLARD:

Q. I call the attention of the witness to the fact that the question put by the chairman had reference to the more immediate function of money.—*A.* The one function without the other is nothing; they are inseparable.

By the CHAIRMAN:

Q. How much silver, in your estimation, will Europe require for subsidiary coinage?—*A.* Scarcely any. England has her fractional currency in full, so has the Latin Union, and the same is the case on all the Continent. There remains still some fractional currency to be coined in Germany. But Germany employs for this purpose a portion of the old fractional silver currency, which she has demonetized. With regard to

the quantity necessary for small change, the Latin Union has fixed and coined six francs *per capita*, pursuant to the treaty of 1865. Germany has enacted that she will coin ten marks (about \$2) per head of population.

Q. What amount of silver do you estimate to be necessary for the use of Europe for subsidiary coinage, and to maintain that coinage intact?—*A.* The maximum cannot exceed the ratio of France and Germany, that is to say, between twenty-five and forty grammes of pure silver per head of population. I say “grammes,” because, if silver is everywhere demonetized, it is fictitious to express its value rather than its weight.

Q. State more definitely the amount expressed by twenty-five grammes of pure silver.—*A.* It is near six francs; something more than the silver contained in your trade-dollar.

Q. How do you account for the fact that Great Britain has, and keeps for the purposes of subsidiary coinage, nearly a hundred millions of dollars nominally, and is able to maintain it at par with gold, although the coins are very much under-weighted?—*A.* In England, the quantity of fractional currency is something greater than it is on the Continent, because in England there are no small bank-notes in circulation. The maintenance of the par is simply due to that circumstance—that silver is no legal tender except for payments of forty shillings. The pennies (which are in bronze) have

the same situation. They circulate for a value greater than the value of the metal. But all which concerns fractional currency is without importance upon the great question of money—that is to say, of the legal tender in full, with unrestricted coinage, and without monopoly of issue for the Government.

Q. I will say here that I only referred to the use which would probably be made of four or five hundred millions of dollars' worth of subsidiary coin in Europe for the purpose of showing that, even if Europe demonetized silver, there would still remain a very considerable demand in Europe for that metal.—*A.* It is a mistake. When the mint is closed, as it is closed after all the fractional currency is coined, and it is actually coined, the miners cannot have the hope of selling parcels of silver in Europe for the purpose of having it coined into fractional currency.

Q. Have you made any careful estimates as to the amount of silver used annually in the arts? and, if so, be good enough to state your estimates, and the basis upon which they are made.—*A.* I have never made the calculation. I consider the employment of silver in ornaments as insufficient to keep open a single mine of silver, if silver is not legal tender. The exploration of the mines would be a miserable business, and the people who at present like to have ornaments in silver because silver is money, will cease to employ silver as an ornament. Before 1871 people possessing silver plate, for

instance, would lose the interest on the capital they had spent; but they knew there was nothing to lose on the capital itself, because, without selling the silver plate, it was possible to go to the mint. That was the case also with the American silver plate until France coined without restriction gold and silver. Silver was not accepted at the mint in America, but the value of silver was guaranteed by the French law.

Q. State whether it is or is not a fact, that in all the products manufactured of silver in Europe and the United States, the pure silver contained in the plate, such as watch-cases or for other uses, is not worth more than double the value of silver contained in them; and if, therefore, at all times, any modern manufacturer or owner of plate and other similar material would not have to suffer a loss of over fifty per cent. in turning it into money.—A. I myself possess a certain quantity of silver plate, and I believe that I would have lost only ten per cent., or thereabouts, if, before war was declared by the mono-metalists against silver, I had brought it to the French mint. With $15\frac{1}{2}$ ounces of silver plate one was always sure to obtain one ounce of gold, as well in London and in Paris as in Chili and in Belgium. The silver plate before 1871 had in Europe and in the United States an invariable intrinsic value—that is to say, a legal monetary value in francs; and these francs were ever and always, without loss, convertible into sterling pounds and gold dollars. Now, the intrinsic value of

silver plate can only be expressed in Indian rupees or Mexican piasters, and nobody can say what may be in Europe, from day to day, the value in European or United States money of rupees and piasters.

Q. Would your answer apply to the greater quantity of the silver manufactured into plate, or does it only apply to very heavy plate, such as is not ordinarily in use?—*A.* I speak especially of forks, spoons, and ordinary table-service.

Q. Is not the use to which silver is applied in the arts much more extensive than that to which it is applied for purposes of ornamentation? Among other uses, to which I refer, are those of the manufacture of nitrate of silver and in looking-glass manufacture, and its increased uses for photographic purposes, where silver seems to be the best material that is available for purposes for which it is required.—*A.* It is possible that such is the case. But the value of a monetary metal does not depend upon its employment and consumption in the arts. On the contrary, it depends only upon its legal use as money. The monetary stock permanently circulating has a purchasing-power proportionate to its volume. The metal employed in the arts and industries diminishes the volume of the circulating stock, and consequently increases the purchasing-power of every coin. But if the metal was not declared money by law; if silver was everywhere demonetized, except for the irrelevant limited quantity employed as fractional cur-

rency, its value would be almost entirely lost. A subsequent possible rise in the price of silver as merchandise would be without importance. The miners are indifferent to the amount of metal absorbed in the arts and industries; they produce legal tender. Jewelers and silversmiths take a certain portion of this legal tender out of circulation; that is all. The producers of silver would be ruined if they had for customers only jewelers, silversmiths, looking-glass manufacturers, and photographers. Mines are only opened when mints are open.

Q. State, if you remember it, what was the relative production of silver and gold at the beginning of the present century, the time of the adoption in France of the relation of $15\frac{1}{2}$ between the two metals?—*A.* I suppose that the production of silver was, in weight, about 50 to 1 of gold. That is to say, the production was about one to three in the value of the two metals, at the then valuation of $15\frac{1}{2}$.

Q. State, if you remember it, what was the relative value of the production at about the middle of the present century, say in 1849 or 1850?—*A.* I suppose the production was, at that period, about equal in value.

Q. State, if you remember it, what was the relative production from 1852 to 1865?—*A.* As three or four to one in the value of gold as compared with silver.

Q. Up to that time, 1865, how many countries were transacting business under the single gold standard?—

A. There were three—Great Britain, Portugal, and Turkey. Holland, in 1849, had adopted the single silver standard. In 1834 the United States, having adopted a ratio more favorable to gold than the old ratio of 1792, had become in fact, a gold-paying country; but in 1862 this country adopted paper-money.

Q. Do you remember what was the average annual yield of gold from 1852 to 1865?—*A.* About \$130,000,000.

Q. What nations in Europe, between the years 1852 and 1865, were operating under the bi-metallic standard of gold and silver, at a fixed relation, established by law, between the two metals?—*A.* I have here a table in which I give the mint regulations of several states. It can answer:

METAL-PAYING COUNTRIES.

1 to 15½	$\left\{ \begin{array}{l} \text{France,} \\ \text{Belgium,} \\ \text{Switzerland,} \\ \text{Spain,} \\ \text{Germany.} \end{array} \right\}$	The coinage of silver stopped, but the old silver coins still circulating as legal tender in full.
1 to 15.604	Holland.	
0	England and Portugal	—only silver used for tokens.

PAPER-PAYING COUNTRIES.

1 to 15.50	Italy,	Ratio if specie payments were resumed.
1 to 15.45	Austria,	
1 to 15.30	Russia,	
0	Turkey, gold-mono-metallic, if specie payments were resumed.	

Until last year the ratio in Spain was something less than 1 to 15½. This ratio has been enacted only

recently. Holland was silver-monö-metallic between 1849 and 1872. At present she coins gold gulden at a ratio with silver gulden, which differs very little, as you observe, from the general ratio, 15 $\frac{1}{2}$.

You see that if the countries where bi-metallic money is now in circulation would agree to reopen their mints for the unrestricted coinage of silver at their ratio 15 $\frac{1}{2}$, and if you adopt the same ratio, bi-metallism at 15 $\frac{1}{2}$ would become general without melting down either the silver or the gold coins now in circulation.

By Mr. Gibson :

Q. What do you mean by the terms "single standard" and "double standard?"—*A.* "Standard" is the metal selected by law to be legal tender in full, with unlimited mintage. The "standard" is bi-metallic when by law gold and silver are legal tenders in full at a fixed ratio, and both coined to all comers without limitation.

Q. You include free importation of the metals?—
A. Of course.

Q. Then I understand that in stating, in answer to the question of the chairman, that the bi-metallic standard prevails in the countries you have designated, you meant to be understood as saying that in those countries there was no limitation upon the coinage, no tax upon the importation of the metal?—*A.* Exactly that.

Q. There is no distinction made in favor of the one metal as against the other?—*A.* No. But I am obliged to say, that in the bi-metallic countries gold was treated with some preference with regard to the cost of the coining; this cost was taken in consideration of the weight, and as a sum in gold is lighter than the same sum in silver, it costs something less to obtain from the mint gold coins than silver coins. In other words, the ratio of fifteen and a half, which was the ratio in France between gold coin and silver coin, was not exactly the ratio between gold bullion and silver bullion. It was necessary to bring to the mint not only fifteen and a half of silver, but fifteen and fifty-eight hundredths, in order to obtain the same quantity of money which was obtained in bringing there one of gold. If the nations will come to an agreement for adopting a uniform legal bi-metalism, I would suggest the fixing the cost of mintage on the legal value, and not on the legal weight of the two metals.

By the CHAIRMAN:

Q. Between the years 1852 and 1865, was the legal relation in Europe uniform between the metals operating under the double standard?—*A.* We can consider it as uniform, because in Austria and in Russia, where there was some difference, the paying money was in paper, just as at present.

Q. What countries in Europe, from 1852 to 1865, operating under the bi-metallic system, were in the active

use of such money ?—*A.* The Latin Union, and especially France, which was the great centre of the bi-metallic action.

Q. Did those bi-metallic countries during that period keep their mints open to the free coinage of both metals ?—*A.* Entirely open.

Q. Can you state what was the relative production of gold and silver between the years 1852 and 1865 ?—*A.* About three of gold to two of silver.

Q. Was any substantial variance in the relative value of the two metals—such a variance as would cause inconvenience in business—observable during the whole period from the commencement of the century to the year 1872 ?—*A.* There was some slight inconvenience for the mono-metallic countries, which were obliged to pay some small premium to bi-metallic France when they wanted the one or the other metal. So England, when she constructed the railways in India (which is a silver-paying country), was obliged to go to France with her gold in order to obtain five-franc pieces, and the French people made a profit in the operation. If India and England had been bi-metallic, as was France, the incident and the profit would not have occurred.

Q. We are now led to a consideration of these facts, that, at the commencement of the century, the production of silver was as 3 to 1 of gold ; that the relative production decreased until the middle of the century, when it was about equal in value with that of gold,

and still further decreased between the years 1852 and 1865, so that not more than one-fourth in value of silver was produced in the world as compared with gold, and then increased until about the year 1870, and between that and 1876 (when the yield of silver was as 2 to 3 in gold); and that France, principally by reason of free coinage of both metals, was enabled to stop a great rise in gold, and to keep the two metals practically at a parity at the relation of $15\frac{1}{2}$. Does it not therefore follow as a consequence, that, if France and the Latin Union should now open their mints to free coinage in the presence of a much smaller yield of silver, and if the United States came in as an auxiliary with free coinage at the same relation between the metals which obtains in France, it would insure absolute parity between the metals at the relation of $15\frac{1}{2}$?—A. Undoubtedly. But, before obtaining this desirable effect, two conditions are necessary : First, that the monetary transformation of Germany should be at an end, in order that France should not be alone in absorbing all the silver thalers of neighboring Germany ; secondly, that the United States shall resume specie payments, because as long as they pay in paper they cannot be a very effective ally for France.

Q. When I refer to the United States as being an ally of France in this bi-metallic system, I mean to be understood as intimating that the adoption of such a system would be concurrent with the resumption of

specie payments. The statistics show that in seven or eight years France with free coinage was enabled without inconvenience—in fact, greatly to her interest—to coin a large amount of gold subsequent to the year 1852, amounting to about \$600,000,000. Now I ask, Could not France herself, assisted by the states of the Latin Union, take the silver which Germany has to offer, as well as any surplus from the mines over and above the demands of the rest of the world, and thus maintain the parity between silver and gold, as she did formerly in the presence of a large supply of gold?—A. The position of France is not at present what it was before 1871. Then, France had on the one side England (*mono-metallic gold*), on the other side Germany (*mono-metallic silver*). Being bi-metallic herself, it was easy and usual for her to be changing the coinage of the two metals. To-day all is different. If France coins silver, all the silver of the world, beginning with the German silver, would flow into France. France is not prepared now, I suppose, to pay to Germany 1 of gold for obtaining in exchange $1\frac{1}{2}$ of silver.

In 1874 I published many letters with a view of inducing France to maintain the unlimited mintage of silver. A different policy has prevailed, that of limitation of coinage—the worst of all possible measures, because this limitation has necessarily the effect of giving to the coined metal a privilege over the uncoined, and therefore a greater value. The metal coined under these

conditions is deprived of international paying power; it is to be considered more as *token* than as true money. To-day the limitation has been abandoned: the French mints now refuse all silver; they receive only gold. If that system had been adopted in 1871, when the German law was promulgated, the fall of silver in London would have been so great that Germany, perhaps, would have been obliged to adopt immediately the bimetallic system—either the immediate stoppage in the coining of silver, or the continuance of the unrestricted coinage. Both these policies had their advantages, the limitation had none. But to-day it is too late for choosing. At the present moment France has nothing to do but to wait. If she recommends anything to the other nations, she is suspected of pretending to dictate to the regulation of their mints. Moreover, in the present monetary crisis which the mono-metallic action has created, France is the country which suffers the least.

Q. How much silver do you estimate Germany has for sale?—*A.* In comparing all that has been published, I am of opinion that there remains to be sold a quantity of silver which would be sufficient to coin about 70,000,000 trade-dollars.

Q. If the United States should now take measures for the resumption of specie payments, and should establish the legal relation between gold and silver at $15\frac{1}{2}$ to 1, with unrestricted coinage of both metals, and

France and the Latin Union should permit unrestricted coinage, would that \$70,000,000, added to the current surplus supply from the mines of the world (provided it was all thrown out at any one time), produce any appreciable effect upon the value of silver? or would not the great demands of the United States for the purposes of resumption (which would be made in silver, unless silver remained of less value than gold at that relation) speedily take the value of silver, until there should be parity between it and gold at $15\frac{1}{2}$ to 1?—*A.* When the United States will really resume, and coin silver at the same ratio relatively to gold at which it is coined by France, and declare that every silver dollar has for every purpose the same legal value as the gold dollar, the value of the two metals will instantly be and remain forever at $15\frac{1}{2}$, notwithstanding the German and the Nevada silver.

WEDNESDAY, February 7, 1877.

Present: Senators Jones, of Nevada, chairman, and Boutwell; and Representatives Willard and Bland.

By the CHAIRMAN:

Question. Have you given attention to the financial situation of the United States, especially with reference to the resumption of specie payments, together with the feasibility of utilizing our great silver products as a means to that end?—*Answer.* I have.

Q. Be kind enough to give your conclusions in that regard.—*A.* During my stay in Washington, I have had the opportunity of hearing the debates of the House of Representatives on the silver question. They were so anxious to restore the silver dollar, that they considered as a dilatory motion the resolution passed by the Senate for an international monetary convention. There prevails also, so to say, a national pride, which suggests the adoption of bi-metallic money before entering into any agreement with foreign nations. Taking these circumstances into consideration, I framed last evening a proposition which I now beg to submit to the commission. If adopted, general bi-metalism would be established without recourse to conferences and treaties.

MR. CERNUSCHI'S PLAN FOR THE RESUMPTION OF SPECIE PAYMENTS IN GOLD AND SILVER ON JANUARY, 1878.

The Secretary of the Treasury to be authorized and required, as rapidly as practicable, to open for three days, in the principal markets of Europe, a public subscription to a loan of £85,000,000 (nominal), to be called the "United States Sterling Consols," with perpetual interest at the rate of 4 per cent. per annum, payable half yearly in London, in pounds sterling.

The coupon first due shall be paid on the 1st day of October, 1877.

The price of issue shall be under par, at such rate as,

in the judgment of the Secretary of the Treasury, will insure the success of the operation.

The installments on the loan shall be payable monthly, and shall extend over a period of twelve months, with option of payment in advance, under discount, at a rate to be fixed from time to time by the Secretary of the Treasury.

Should the amount applied for be in excess of the whole amount of the stock, the subscriptions will be reduced *pro rata*.

The expenses of the issue will be paid out of the funds produced by the loan.

The United States sterling consols to be exempt from the payment of all taxes or duties of the United States.

The specie-payments resumption will take place in January, 1878, and the greenbacks will continue to circulate, but as certificates of deposit reimbursable in coin, at call, in New York.

On and after the 1st of January, 1878, the mints of the United States will be open for the coinage of the old silver dollar, weighing $41\frac{1}{2}$ grains, $\frac{9}{10}$ fine; and, upon the adoption of this plan, the weight of the gold dollar will be immediately raised to 26.61 grains, $\frac{9}{10}$ fine, and the gold pieces will be coined accordingly.

The mint-charge for converting gold and silver standard bullion into coin shall be equal for the two metals, at the rate of one-half cent per dollar coined.

Until the 1st of January, 1878, the gold coins now current may be exchanged for new gold coins, dollar for dol-

lar, at the office of the Assistant Treasurer of the United States in the city of New York, after which time they will cease to be a legal tender.

On and after the 1st of January, 1878, all existing debts stipulated in dollars, of whatever denomination, shall, without exception, be payable in the new bi-metallic currency ; and gold and silver dollars shall be equally legal tender in full for all payments.

EXPLANATORY NOTE.—To resume specie payments, the Government of the United States must not only retire \$300,000,000 of greenbacks, but must supply their place by putting into circulation \$300,000,000 of metal. Should the greenbacks be converted directly into interest-bearing bonds, the country, being deprived of currency, would be exposed to a monetary crisis, and the Government, after having issued interest-bearing bonds in exchange for greenbacks, would possibly be under the necessity of issuing new greenbacks.

Admitting that the excess of exported over imported merchandise shall result in an importation of gold, and admitting that the Nevada mines shall be very productive, the metal so imported or extracted is not the property of the Government, but of individuals ; and the fact still remains that, if the Government shall retire greenbacks, it will have to procure a metallic sum of \$300,000,000.

For that purpose bonds must be issued, but what bonds ? If the Government issues bonds with principal

and interest payable in gold and silver at its pleasure (as are all the United States bonds issued in Europe up to the present), and if, at the same time, the law of 1873 prohibiting the coinage of silver is abrogated, these bonds will undoubtedly be refused in Europe. Europe has taken them until now because, although stipulated payable in gold or silver dollars, there were no silver dollars existing, and no silver dollars could be coined. But if you begin to recoin silver dollars, all is changed ; silver dollars are then at your disposal, and as the coinage of silver is now prohibited throughout Europe, and silver is there no more than a merchandise without monetary power, your bonds would be unsalable. Austria, which has always issued silver bonds, was recently obliged to issue gold bonds.

If, on the other hand, in beginning to recoin silver dollars, you should issue bonds with principal and interest payable exclusively in gold dollars, you would recognize the gold dollar as having a superiority over the silver dollar. In place of the bi-metallic standard you would then have two conflicting standards, gold as international money, and silver as merely national money ; all your gold would be rapidly exported, and you would remain with only silver. As compared with such a result, it would be better to maintain the present national currency, the greenbacks, and thereby save to the Government the burden of issuing new bonds.

The only safe means to overcome all difficulties is to issue an external loan in sterling. By this you not only

avoid making a distinction between the gold dollar and the silver dollar, but you do not engage to pay the coupons expressly in gold. You will pay in pounds sterling.

The pound sterling was for a long time of gold and silver, then of paper. It is of gold to-day, but before long may be again of gold and silver. Therefore it is evident that for the American people a debt in sterling is less stringent than a debt in gold dollars.

Once in possession of \$300,000,000 of gold, produced by the sterling loan, the United States will be strong enough to establish bi-metalism. Then France recoins silver willingly, and the general rehabilitation of this metal follows as a natural consequence. Silver being rehabilitated in America and in Europe, the silver dollar having the same paying-power as the gold dollar, you injure nobody in declaring that all debts stipulated in dollars, of every denomination, will be paid in the new bi-metallic money, dollar for dollar.

All this is possible with a loan in sterling. All this is impossible with a loan in coin dollars.

Being drained of a considerable sum of gold, England cannot fail to see to what dangers she is exposed by her gold mono-metalism, and perhaps she will consent to confer with the powers for assuring by international law a perpetual peace between gold and silver.

The subscriber will have to deposit only the small sum which will be sufficient to guarantee the payment of all the installments.

Issued under par, the United States sterling consols

will easily command a premium on the market so soon as the subscription is announced, and the whole stock will be eagerly sought after, as well for permanent investment as for speculation.

All loans issued in France within the last thirty years have been issued by public subscription and under par. Through this method France obtained the money required for the wars in the Crimea and in Italy. Through this method France was empowered to pay so rapidly the German indemnity.

Once the subscription covered (and it can be covered within twenty-four hours), more than \$300,000,000 gold are assured to the United States, and the era of paper-money is closed.

The reason why the issue of a perpetual debt is preferable to that of a debt reimbursable at a fixed date is that when the amount is very large, the engagement to reimburse at a fixed day is too onerous.

And it is for this main reason that the English consols and French rentes are constituted as perpetual funds.

Let the United States finances be prosperous. The excess of the revenue will then be first employed to extinguish the dollar bonds ; and when the perpetual debt shall be the only debt in existence, it will be easy to reduce it in buying bonds on the market or by reimbursing them in series.

Raise the weight of the gold dollar to 26.61 grains, in order to establish between the weight of the gold dollar and the weight of the silver dollar the ratio 15½—a ratio

without which bi-metalism cannot be realized. If you revive the ratio 16, France cannot recommence to coin the five-franc piece, which weighs $15\frac{1}{2}$ times the five-franc gold piece.

In 1834 the weight of the gold dollar was reduced 6 per cent. In now bringing it to 26.61 grains its weight is augmented 3 per cent., and the error committed in 1834 is duly repaired.

The loan, the resumption, and the coinage of silver as legal tender in full, are three operations whose success depends upon their being realized simultaneously and rapidly.

HENRI CERNUSCHI.

THE ARLINGTON, WASHINGTON, *February, 1877.*

This is my plan and these are my explanations. If the United States, instead of reducing the amount of the interest-bearing debt, had reimbursed the debt without interest—paper-money—specie payment would have been resumed some years ago. Not having done this, you are now obliged to issue new interest-bearing bonds in place of the bonds you have reimbursed too soon.

By Mr. BOUTWELL:

Q. Has France made any considerable loan except through bankers?—A. Since 1848 all loans issued by the French Government have been offered to public subscription, and have never been offered through bankers. I am confident that, if you issue this loan in

Europe, the first financial institutions and the first bankers will open the subscription with a trifling commission.

Q. In what manner was the Gambetta (what is called the "Morgan") loan put on the market?—*A.* It is true that when Paris was besieged, and when all the public service of France was disorganized, a small loan was made in London through the medium of a banker; but this exception does not impugn my assertion. I may add, that the three or four loans issued by the city of Paris in the last six years have been issued by public subscription, and they have always been subscribed for within twenty-four hours, and to amounts several times in excess of the amounts of the loans, commanding at once a good premium on the market. The credit of this country is so good and so deserved, that great success will certainly be achieved in opening a public subscription in Europe.

Q. How was that loan placed which was authorized after the close of the Prussian War?—*A.* By public subscription.

Q. Were bankers then employed as agents?—*A.* They were not.

Q. What was the rate of interest on that loan, and at what price was it sold?—*A.* The first half, which was issued in July, 1871, was in 5 per cents., perpetual. It was issued, I believe, at near 82. The second, issued in 1872, was offered at 84½. These two loans consti-

tute the same fund, and the loan is worth at present 106, ex-dividend.

By Mr. WILLARD:

Q. In what coin is it understood that the national loan of France is held?—*A.* In francs; that is to say, in the legal standard, which can be changed, but which, at the moment of the issue, was bi-metallic.

Q. Was the Morgan loan an exception?—*A.* The Morgan loan was contracted in London, and was payable in sterling, but now it has been reimbursed.

Q. Do you think that the market value of French rentes in Europe would be essentially affected by the removal of the restrictions now placed upon the coinage of silver by the Latin Union?—*A.* I suppose that France will never remove these restrictions except in the case of some great event in the other monetary legislations, which would permit her to act without danger. I entertain the conviction that if the United States, by the operation here suggested, becomes a powerful bi-metallic country, France will immediately open her mints to silver.

Q. Is there any probability that the remonetization of silver in the United States would either materially affect the public credit of this country, or influence the value of American securities?—*A.* My conviction is absolute on that point. If you are alone in coining silver, it would be impossible for you to place other

bonds in Europe, and then I do not see how you could resume specie payments.

Q. There is another question upon which I think it is fair that your views should be presented: Have you any reason to suppose that the restoration of the double standard in this country would be regarded in Europe as a breach of public faith, or as indicative of a want of national integrity?—A. All these questions are subordinate the one to the other. If the operation is well conducted, you would command public confidence; and as France is bi-metallic, no one will care in what metal your bonds will be paid. When bimetallism shall be restored on a solid basis, there will be no difference at all in the purchasing-power of the gold dollar and of the silver dollar.

Q. Is it the general belief among the leading economists and financiers of the Old World that the matter of the adoption of a money standard in the United States is one which our own people are fully entitled to determine and settle, provided the national debt is paid in the coin in which it was stipulated to be paid at the time the debt was contracted?—A. Certainly; you have the right of choosing for your domestic use a monetary standard, and to maintain for the national debt a different standard, but in so doing you would create a great confusion. If by law you give to the gold and to the silver dollar the same paying-power, you are at liberty to change the ratio, 1 to 16, stipulated in all

your bonds, into the ratio 1 to 15½. No creditor would be wronged. But, in order to gratify all scruples, no matter how unfounded, instead of reducing the weight of the silver dollar from 412.5 grains to 399.90, you can raise the weight of the gold dollar from 25.8 to 26.61, and declare all debts, old and new, public and private, to be payable as well in silver as in gold dollars.

Q. Then would not an increase of the weight of the gold dollar be virtually an increase of our national debt, and would we not then, in the discharge of our obligations, pay more than we had agreed to pay?—*A.* If you desire to pay less, you can reduce the weight of the silver dollar; but, if you desire to institute bimetalism, you are obliged to choose between the increase of the gold dollar and the decrease of the silver dollar. In reality, the increase of the gold dollar more directly affects the interests of the mining community than it affects the interests of your Government. You will receive as taxes gold and silver dollars, and you will pay your debt with the same. The real damage that you will suffer will consist in the retirement of the now-existing gold dollar, upon which you will lose 3 per cent., because you will be obliged to change every gold dollar for a heavier one.

By Mr. BLAND:

Q. If the United States adopts the bi-metallic system and the Latin Union continues bi-metallic-money,

will not the effect be to make silver as valuable as gold?—*A.* Certainly; but it is absolutely necessary that the United States should resume specie payments. If the United States adopts bi-metalism without resuming, its situation will resemble that of Italy, which is bi-metallic only in name, and which affords no assistance to the bi-metallic cause.

Q. Do you think that we can resume specie payments after adopting the bi-metallic system?—*A.* In my opinion the two operations must commence simultaneously.

By the CHAIRMAN:

Q. What kind of money is now in circulation in France?—*A.* Silver, gold, and the notes of the Bank of France.

Q. Are the notes of the Bank of France at par with specie?—*A.* Yes; they are at par.

Q. Practically, then, the business of France is conducted on a specie basis?—*A.* Yes.

Q. Then, by the resumption of specie payments in France is meant that the Bank of France shall resume specie payments, and make its bills convertible, at the will of the holder, into gold and silver?—*A.* Yes, sir; this resumption can be made at any moment. But France adjourns the resumption, to avoid giving to Germany the possibility of driving gold from the Bank of France.

Q. How much of specie (gold and silver) do you

estimate to be in circulation at the present time in France?—*A.* I estimate it at \$1,000,000,000 gold and silver together.

Q. How much paper is in circulation in France at the present time?—*A.* The notes of the Bank of France in circulation amount to \$500,000,000; and the cash in hand of the bank is not very far from the same sum.

Q. Do I understand you to say that there is now in circulation in France \$1,000,000,000 in specie and \$500,000,000 in paper, making a total circulation of \$1,500,000,000?—*A.* No; the cash which is in the Bank of France is to be deducted, as it is, so to say, already represented by the notes.

Q. That would leave a total of about \$1,000,000,000 in circulation?—*A.* Yes, sir.

Q. Do you know what is the circulating medium in Italy?—*A.* In Italy, as in Austria, it is entirely a paper circulation. The silver circulating in France comprises almost all the silver and gold coined in Italy.

By Mr. BLAND:

Q. If the United States resumes specie payments, adopts the bi-metallic system, and makes coinage free, will not France remove the restrictions on the coinage of silver?—*A.* Certainly. But she can hesitate if bimetalism is only nominal in the United States, and if in fact you continue to make your payments with paper-money.

Q. Cannot France and the United States, provided the latter resumes specie payments, sustain the bi-metallic system without the aid of England and Germany, or of either?—*A.* I have no doubt of it. You have seen France maintaining for a century the ratio of fifteen and a half between the value of the two metals, in every part of the world. Since 1871, certainly, the circumstance that Germany has renounced her ancient silver mono-metalism is unfavorable to bi-metalism. The accession, the frank and courageous accession, of the United States to the bi-metallic system will more than compensate for that disadvantage.

Q. Would not France and the United States in that event have a better monetary system for the people than is that of England or that of Germany?—*A.* Yes; a monetary system based on two metals is more safe than it is when based on only a single metal. England has suffered many monetary crises, simply because she had only one metal in circulation.

By the CHAIRMAN:

Q. Would the fluctuation in the value of services and commodities be as great under the bi-metallic system, provided one or two great nations adopted such system at the same relation of value between gold and silver, as it would be under the mono-metallic system, even though a variation did occasionally occur in the values of the two metals and the temporarily cheaper one were used for the purposes of payment?—

A. If several great nations adopt the bi-metallic system, all the nations, including China and England, are, so to say, involved in that system, the relative value of the two metals being everywhere determined by the legal ratio of the bi-metallic nations. Then, the prices of all commodities are more stable than if only gold was used as money by every nation. The volume of gold and silver together is less sensible to the variations in production than the volume of a single metal. These demonstrations I have frequently made in my publications.

By Mr. WILLARD:

Q. Suppose that the United States should recoin silver, and make it a legal tender at the standard previous to 1873, in connection with the suspension of the coins of gold, would the restoration of the silver standard in that case have an unfavorable effect upon the bi-metallic system of the Latin Union?—*A.* In that case your position is a mono-metallic position. All the silver of Germany will arrive here, and later, also, the silver of France, and then there will be no monetary communication between Europe and the United States. There will be a return to barter, the barter between gold and silver without a legal ratio. It is impossible to make payments if there is not a common money. So between individuals and so between nations.

By Mr. BLAND:

Q. I understand your position to be that, in the

restoration of the double standard in this country as it was previous to 1873, the United States Government undervalued silver as compared with France and the other nations of the Latin Union, and that now this undervaluing of silver would be one of the reasons which would prevent the further coining of silver in the Latin Union?—*A.* There is nothing more certain. Should you resume specie payments with bi-metalism, at the ratio of 16, France would persist in refusing to undertake the coinage of silver; and for this reason, that if she coins at the ratio of $15\frac{1}{2}$, not a single dollar in silver would be coined in the United States, as was the case immediately after your law of 1834, enacting the ratio of 16.

By Mr. WILLARD:

Q. But if the United States, by stopping for the present the coinage of gold, should practically adopt the mono-metallic system of silver, how could silver in that case be said to be undervalued in the coin in this country, and how could that have an unfavorable effect upon the bi-metallic system of the Latin Union?—*A.* The Latin Union would not coin silver if she is alone to possess bi-metalism; she will wait. And the evil will be with you, because in coining only silver you remain isolated, in a monetary point of view, just as is the case with India.

Q. Has your attention been specially called to the coinage system of the United States?—*A.* I have im-

proved such opportunities as have been given me for studying its history in the Library of Congress, and have had the very courteous and intelligent assistance of the librarian, Mr. Spofford. In 1792 you had established the ratio of 1 to 15. It was a mistake, because the ratio in Europe was $15\frac{1}{2}$. In this connection I would ask attention to an extract from a letter from an eminent financial man, Mr. Gallatin, to the Secretary of the Treasury, dated Washington, December 31, 1829, as follows:

“The ratio 15 was the result of information clearly incorrect respecting the true relative value of gold and silver in Europe, which was represented as being at the rate of less than 15 to 1, when it was, in fact, from 15.5 to 15.6 to 1.”

Under this ratio (15) the consequence was that gold was not coined in the United States; and as in 1816 England resumed specie payments in gold, there was on the general market an oscillation in favor of gold. Then the debates upon the subject of changing the ratio were opened in the American Congress in the year 1818. From those debates I have made certain extracts, to which I beg to call the attention of the commission. They are as follows:

Debates, 1818 to 1834, for changing the ratio 1 to 15 of 1792.

1818. *March 27.*—Matter introduced in Congress by William Lowndes, chairman of Ways and Means.

1819. *January 19.*—William Lowndes presents his report, in which he says : “The committee proposes to restore gold to its original situation in this country—1 to 15.6.”

1829. *December 29.*—Albert Gallatin writes to the Secretary of the Treasury : “The most convenient ratio is 1 to 15.6.”

1830. *May 4.*—Mr. Ingham, Secretary of the Treasury, in his special report to the Senate on the relative value of gold and silver, says : “To adopt the ratio of France might tend to a general conformity of mint-regulations among different nations, and in time remove that cause for fluctuation which proceeds from the successive changes of their respective mints” (page 19).

1831. *February 22.*—Report of the Select Committee on Coins, by Campbell White. We read : “The committee are firmly of opinion that the rate proposed by the Secretary of the Treasury, of 1 of gold to 15.625 of silver, is the utmost limit to which the value of gold can be raised.”

1834. *March 17.*—The same committee recommends that the relative value of gold be fixed at 1 to 15.625 of silver.

1834. *June 21.*—In the House of Representatives, the committee having for the first time proposed the ratio 1 to

16, Mr. Selden suggests 15.58, increasing the weight of the gold dollar from 25.8 to 26.4. Mr. J. Quincy Adams said he should vote in the affirmative, though, he said, very reluctantly, and in the hope that the ratio 16 would be amended elsewhere. He considered it as decidedly too high. Mr. Gorham proposed a gold dollar of 26 grains = 15.57. Mr. Whilde admitted that, by the existing law (1 to 15), gold was undervalued; but by the new bill (1 to 16) it would be overvalued, that, of the two, he should prefer the old one. But the bill was passed—145 yeas, 36 nays.

1834. *Senate, June 28.*—Mr. Sprague said he could not vote for the bill. He believed it would throw the evils on the other side. We were creating the same disproportion between gold and silver as at present existed, making a distinction on one side as much too wide as that which now existed on the other side. All agree that the true line was between the two extremes. Why gentlemen should transcend the point which everybody agreed was the true line of value between the two metals, he did not know. No one recommended that the true value was 16 to 1, but all believed that it was between 15 and 16. But the bill was passed—35 yeas, 6 nays.

It is important here to consider that, during a period of sixteen years, the ratio $15\frac{1}{2}$ has always been recommended by the most experienced and competent men on the subject, and that the ratio 16 has never had an

advocate. Notwithstanding this, at the last moment, in 1834, the ratio 16 was adopted by the American Congress, being in the end considered to be agreeable to the Government at that time. The proprietors of the mines of Georgia and Carolina were satisfied with coining \$106 with the quantity of gold which was necessary before for coining \$100. The effect of that law was the expulsion of silver from the United States—an expulsion so complete that even all the small change left the country. In 1853 you were obliged to issue a silver fractional currency in a debased condition. Another error was committed in 1873, when, without having a single dollar of silver, you enacted the demonetization of that metal. There was no silver; then why have demonetized it? It is important at this juncture that no error should be committed; and for avoiding new errors, it is wise to remember the errors committed in 1792, in 1834, and in 1873.

By the CHAIRMAN:

Q. Did I understand you correctly yesterday as stating that the recent remarkable divergence in the relative value of the precious metals was caused chiefly, if not solely, by the monetary legislation of Germany in 1871 and 1873?—*A.* I have so stated—that it was caused solely by that.

Q. Was the attempt that was made by Germany to demonetize silver beneficial, or injurious, to that country?—*A.* It was injurious. She has lost all the differ-

ence between the old value of silver and the value at which she has sold. She suffers also the disadvantage of having now in circulation the new piece of five marks, which is a debased coin.

Q. Was it beneficial, or injurious, to any other country or countries?—*A.* It was injurious to all the countries, and chiefly to England in her intercourse with India.

Q. What other countries besides England and Germany suffered great inconvenience by such legislation?—*A.* The countries of South America, Austria, Russia, and India.

Q. Did the countries using paper-money, such as Russia and Austria, suffer any evil effects so far as relates to the internal commerce of those two countries?—*A.* Yes, sir.

[NOTE.—A continuation of the last answer is given at the opening of the session of the following day.]

THURSDAY, February 8, 1877.

Present: Senators Jones, of Nevada, chairman, Boutwell, and Bogy; and Representatives Willard and Bland.

HENRI CERNUSCHI resumed.

By the CHAIRMAN:

[NOTE.—The last question put to the witness on the

preceding day, and then partially answered, was here repeated, and was followed by a more specific answer, as follows :]

A. Yes, sir. My answer is based not merely upon any argument of my theory, but upon matters of fact. A great crisis has taken place, principally in Vienna, this being a consequence of the great fall of silver on the London market. The public debt of Austria is stipulated in silver, and the bondholders were nearly ruined by the event. It would take too long for me here to give a description of the crisis, but I declare that the paper-paying country suffered by the derangement of the relative value between gold and silver much more than did the metallic-paying country. There is no way in which to escape the precepts of science. Paper-money is a bad money, and no argument can be invented for inducing a country to prefer paper-money to metallic money. My evidence should be construed as being rather in defense of bi-metalism against mono-metalism than as combating the theory of paper-money.

Q. Is it your opinion that, if the legislation of Germany demonetizing silver were not counteracted by the legislation of other countries of equal standing, the depreciation of silver would be permanent, and would perhaps be increased?—*A.* Certainly. I hope that a salutary reaction will induce many countries to adopt a bi-metallic law, and so counteract the action of mono-

metalism; but if this step is not taken, the price of silver will fall to a low level, and in any case never recover the old fixity that it possessed relatively to gold under the reign of bi-metalism.

Q. Did I not understand you correctly as saying, in answer to a question previously asked you, that it made no difference of what material money was composed, whether it was costly or otherwise; that the law of legal tender gives value to money, and that this value of money was increased or diminished in proportion as its volume was greater or less?—*A.* Precisely.

Q. Why, then, would it not follow that the use for money of a material such as gold or silver, which can only be obtained by great expenditure of labor and capital, is unscientific, wasteful, and uncommercial, and that in other respects money made of paper would be as good, and, on the score of economy, much better?—

A. Paper-money has no other guarantee than the goodwill of the Government, which has the sole power of increasing and decreasing the volume circulating. Gold and silver, on the contrary, are issued by Nature herself, and it is not within the option of kings or of congresses to change the natural production. Paper-money cannot circulate abroad, simply because of this want of a guarantee. Add that gold and silver have all the physical qualities for a good money, and you explain why they are adopted by the legislators of many countries, and so become an international money.

With reference to paper-money, another great error prevails. Many people believe that its value depends upon the promise of the Government to repay them in metal one day or other. This promise does not add to the purchasing-power of paper-money. A promise to execute, without date for executing, is not a promise. The only reason why paper-money has a value is that it is legal tender; that nobody can refuse it; that the Government accepts it for the payment of taxes. It is for this reason that it circulates in the same way that gold and silver circulate. Paper-money is not a credit-paper, but an enforced standard. Gold and silver money is also an enforced standard, but possesses qualities which paper-money does not possess, as I have before stated.

Q. As I understand you, the objections to the permanent use of paper-money in any given country are found in its lack of universal appreciation, in the uncertainty of legislation on the subject, and in the tendency to unduly increase or contract the issues and thereby cause disastrous fluctuations in values.—*A.* I can only repeat what I have said, preferring, if you consent, to use my own terms rather than those made use of by yourself. Let me add, that the two political parties have inscribed on their programmes, “Resumption of specie payments”—a proof that the inconveniences of paper-money are acknowledged in every quarter.

Therefore it is perhaps unnecessary to make any argument against its use.

Q. Are not the dangers and inconveniences which you have enumerated as connected with the use of paper-money confined to and controlled by the country interested? and in the use of gold or silver as money, is not a country subject to the same dangers, not only from its own hasty legislation but also from the ill-considered or interested legislation of any and all other countries using such material as money, and in addition to the chances and vicissitudes of mining? And has not the legislation of one country (Germany) relative to the precious metals been sufficient, according to the opinion you have expressed, to produce a crisis all over the world, and especially in countries on the specie basis, and debarred silver from being offered in payment in all the principal countries, thus placing it in that regard on a level with paper-money?—A. We saw, in 1871, a monetary revolution without precedent, when Germany in one day declared that the whole of her money was without value, and that it was necessary to have gold in place of it. This revolution is a lesson for her and for other nations. Bi-metalism will remedy all the evils. But I cannot admit that, because Germany has committed so great a fault, it should be possible to compare the metallic system to the paper system. When I say that bi-metalism will succeed, and is necessary, I am supported by a declaration by one of your

best Secretaries of the Treasury, Mr. Ingham, in his report to the Senate (March 4, 1830, No. 135, p. 10), *respecting the relative value of gold and silver.* I read, and call your attention :

"A conventional agreement among the principal commercial nations of the world which desire to use both gold and silver as standards of value, fixing the same relative values, might avert such consequences (the change of the ratio by other governments).

"But the regulation of the coins of a country is regarded as a high attribute of sovereignty; and until higher objects of ambition shall overcome the folly of maintaining mere dignity at the expense of the public good, it is not to be hoped that such a measure would be favorably considered."

What, in 1830, Mr. Ingham could not hope for, we must hope for in 1877. I confidently foresee that the sons will not indulge in the prejudices of the fathers.

Q. Have you noticed that portion of the testimony by Mr. Ernest Seyd, given before the British parliamentary committee on the depreciation of silver, relative to the coining of the trade-dollar in this country ; and, if so, were his conclusions correct ?—*A.* I have noticed it. The trade-dollar has neither the merits nor the demerits which people ascribe to it. Mr. Seyd, in saying that the trade-dollar weighed 420 grains and that the gold dollar weighed 25.8 grains, stated what was true—that the ratio between these two dollars is 1

to 16 and 63. But this ratio is not a legal ratio. The trade-dollar was not, is not, legal tender in the United States. The trade-dollar is simply a parcel of metal which has received the official stamp, just as in many States forks and spoons receive a stamp declaring the fineness.

The stamp of the trade-dollar declares at the same time the fineness and the weight. The friends of the trade-dollar have believed it would increase the exportation of silver on a great scale. It was a mistake. I have been in China and almost all Asia ; the metal coin is received there as bullion. In proof of that, I will also quote a letter of Mr. M. V. Davis, special employé of the mint at San Francisco, writing to the Hon. H. R. Linderman, Director of the Mint. He says :

“Transactions in fine silver in this market were governed almost exclusively by the London quotations, or the purchasing-rates fixed by the United States Mint. I may also add that, except in some instances, where small shippers paid several points above intrinsic values, trade-dollars ruled proportionately.” (*See Report of the Director of the U. S. Mint for 1876, p. 58.*)

If trade-dollars and silver bullion rule proportionately, it is certain that the trade-dollar is not preferred in Asia to the bullion.

I would add that the more you will export of trade-dollars the less you will export of bullion. For reviving the value of silver, you must not rely on the exportation of the metal, but on the adoption of bimetalism by yourself and by Europe.

Speaking of Mr. Ernest Seyd, I must declare that this gentleman is entirely familiar with monetary questions, and that if he fell into error about the trade-dollar, the error can be attributable only to incorrect information having reached him.

Q. Is the value of gold and silver governed by the law of supply and demand, as is the case with commodities generally?—*A.* No, sir. Gold and silver are not merchandise where they are money, and the one or the other are money somewhere. We ought to consider the miners not as producers of commodities, but as producers of legal tender. They never go to the market; their produce is not to be sold; they are no suppliers.

The mint is open; they go there; there the metal is coined, and the owners of the coins never go to the market for selling them. They are purchasers of everything, not sellers of a merchandise. The market cannot refuse the produce of the mines. All the bullion is money, and really the miners extract from underground dollars, francs, pounds sterling, marks, rupees, and so on. Nobody goes to the market to buy

them with other coins. To the economists who persist in speaking of supply and demand, I say : All the new gold and the new silver are permanently demanded by a permanent and faithful customer, the mint. The mint is under the legal obligation of coining promptly all the new gold and the new silver, and of coining them ; not at the commercial ratio, but at the ratio established by law. *Nomos, nomisma*, as said Aristotle. Hence the situation of the miners is a legal situation. There is a contract between the miners and the law. Miners are never in a state of competition among themselves. Why ? Because the dollars extracted have all the same legal value. It is as if the legislator were the purchaser of all the produce of the mines. If, for instance, you possess a mine which gives an average profit of \$100,000 a year, all the new mines which can be opened near your mine, whatever may be their production and however insignificant the cost of their production, can never diminish your profit. If one supposes that all the mines are in the same hands, the monopoly would not increase the value of money.

The dollars would have the same purchasing-power in the hands of the monopolist as they have in the hands of a number of miners. Metallic money can never be said to be either cheap or dear for the public. When you shall have the silver dollar, Europe coining silver at the same ratio as you, the silver dollar will cost to

the public exactly the same quantity of merchandise or services as the gold dollar costs. The producer of silver dollars will never give them for less. Silver will be, so to say, legally converted into gold; that is all. The superiority of the bi-metallic money consists in this, that it is the soundest national and international money, and that its value, its purchasing-power, is more stable than the purchasing-power of all other money, mono-metallic or paper.

Q. It is claimed by some people that we can have one hundred millions of gold and four or five hundred millions of paper.—*A.* They are wrong. That is your position at present. If you are satisfied to remain as you are, very well. If the silver dollar is not perfectly equal to the gold dollar, the introduction of silver will have the effect of giving you three moneys instead of two, and you will have a silver-room in New York, as you now have there a gold-room. It is to avoid this result that I have suggested the loan in pounds sterling.

Q. Then you believe it impossible to obtain the benefits of bi-metalism, and the stability in money consequent thereon, in any other way than by procuring, before any attempt is made to that end, a sufficiency of metal to redeem all the outstanding issues of the Government?—*A.* I am obliged to you for the opportunity to express myself which your question offers. I answer, Yes. In deciding whether you are bi-metallic or mono-metallic, it is necessary to get rid of paper

money. Neither Austria nor Italy can speak of bi-metalism until they pay in paper. But your position is better. On the Pacific coast, and at all the custom-houses, you pay in metal. You already possess about \$150,000,000 in gold. Still, *resumption* signifies *redemption* in metal of all the greenbacks. For repaying these greenbacks, it is necessary for the Government to have in its hands—not in the hands of the public, but in its own hands—more than three hundred millions of dollars in metal. As, at the present moment, silver is not coined in Europe, and as it is a value without fixity, the best you can do is to carry the war upon the territory of mono-metalism in England, and there issue your sterling consols. This course would have the effect of persuading England that all is not perfect in the mono-metallic system, and she would pay more attention to the arguments of the bi-metalist.

With the realization of the sterling loan I have proposed, there will be but one dollar in this country, the bi-metallic dollar, capable of paying all debts and all taxes. If you maintain the gold dollar for the custom-house and introduce the silver dollar for other purposes, you yourself create a distinction which is opposed to bi-metalism. And if you permit the coinage of silver only as a substitute for the greenback, your Government is still obliged to issue the same quantity of bonds for contracting the greenbacks as for procuring gold from England. Moreover, when that issue of

bonds would be met, the silver dollar would be a bad money, because it would be a money without interchangeability with Europe, where silver is not coined. It is better to maintain the greenbacks than to introduce silver in this condition; at least, there is a great economy for the Government. Silver would be a sort of second edition of the greenback, if the silver dollar is refused at the custom-house.

Q. Do you agree as to the facts and reasons adduced, and concur in the conclusions arrived at by the British commission upon the depreciation of silver?—*A.* I have read with careful attention the report of the English commission. Its chairman is a distinguished statesman, economist, and banker. Still, my conviction is that its inquiry is defective in this, that, instead of being a general inquiry into the monetary situation of the world, it seems to be an inquiry about the fluctuation of a merchandise. Depreciation of silver is a phrase admissible in England, where silver is not money; but this term has no signification in India, where silver is money. Depreciation means diminution of price. Money can never diminish in price, because money is itself the material of which price is composed.

Having made these observations, I beg to add that the English inquiry contains many data which are favorable to bi-metalism. It results from the report referred to that the power of law is absolute in the matter of money; and it results also that the variations in

the relative production of gold and silver during all the present century have been powerless to counteract the action of the French bi-metallic law.

By Mr. WILLARD:

Q. To what causes chiefly do you attribute the importance of London as a centre of exchange?—*A.* I understand the question, and I commence my answer by saying that it is not to gold mono-metalism that England owes its commercial preëminence. *Post hoc* is not *propter hoc*. England has always been preëminent in maritime interests; her genius takes that direction. She possesses immense and widely-separated colonies, with which, so to speak, she is obliged to communicate constantly. Had she bi-metallic currency, England would continue the centre of her great commerce, and avoid in future many monetary crises. Here let me quote the opinion first of Alexander Baring, M. P., who was a bi-metallic advocate, and who suggested to his country the adoption of the French law, as it can be seen in his evidence before the Committee on Coin, to be found in the London *Times* of February 25, 1830.

Mr. Baring recommended the issue of silver crowns (five shillings), containing $15\frac{1}{2}$ times the weight of fine metal contained in five shillings in gold. Mr. Baring was not a man of science as was Isaac Newton; he did not see, what Isaac Newton had seen, that the market relative value of gold and silver is but as the shadow of the mint regulations of the different countries. Alto-

gether, Mr. Baring was a great merchant, a man of large experience; and he could say in his evidence: "In practice the variation between gold and silver is in France seldom above a tenth per cent. It sometimes rose up to a quarter per cent. It has been something higher on particular occasions. When the Bank of England was running all over the Continent for gold, this was the case." Mr. Baring alludes here to the effect of the gold mono-metallic law then enacted in England, by the action of which there was a demand for gold not for commercial purposes, but for coining English lawful money, the sovereigns.

And now let me quote the authority of Robert Peel. Robert Peel was so fully convinced that England is in want of a stable exchange between the silver rupee and the gold sovereign, that in the charter of the Bank of England, in 1844, he introduced a clause authorizing the Bank of England to have silver bullion, instead of gold bullion, to the extent of a fifth of the bullion with which the bank-notes are redeemable in gold. Robert Peel said, on the 20th of May, 1844, in the House of Commons, that it was necessary to have ready a stock of silver in the Bank of England, in order not to depend upon France. At present this dependence does not exist. France coins no silver, but England loses all the advantages she derived from the fixity of exchange with India—a fixity due entirely to the action of French bi-metalism.

The value of silver respectively to gold having lost the fixity imparted by the French bi-metallic law, no longer can the Bank of England keep silver in her walls as guarantee of bank-notes issued payable in gold. If Robert Peel was living, he would undoubtedly advocate the reopening of the English mint for the unrestricted coinage of silver as legal tender in full.

I conclude that it is impossible to attribute the great position of England to her gold money. Before the introduction of mono-metalism she was still the greatest maritime nation. Holland was also a great nation on the seas, and she paid in silver.

Q. If the nations of the world, with the exception of England, should adopt a bi-metallic monetary standard, do you think that the trade of the world would still continue to be transacted upon the standard of England, and that commercial values would be reduced to their equivalent in pounds sterling?—*A.* It is certain that, wherever the English shippers and merchants are established, they will continue to draft bills on London, but there is no disadvantage in that for the other nations. They cannot suppose that India is not under English rule, and that English merchants, English bankers, and English steamers have not the supremacy on the coast of China. English houses purchase in China an immense quantity of tea, which is almost entirely consumed in England. English manufactures are consumed in every part of the New World and of Asia. These

imports and exports constitute a trade which would have been an English trade also if England had been bi-metallic. The opium-commerce between India and China is transacted in silver money—taels and rupees—by English people. To say that the old commercial and maritime genius of England owes its expansion to the Lords Liverpool, the father and the son, the two authors of the mono-metalism, is a fallacy—a fallacy that not a single statesman would support in the British Parliament. England, as well as all the nations, has nothing to lose and much to gain by paying and being paid in bi-metallic money.

Silver is still the principal money of Europe and South America. Silver is the only money of Asia. Silver has always been money. A general gold mono-metalism is a ruinous revolution impossible to be realized. To suggest a European and American gold mono-metalism without legal par with the Asiatic silver mono-metalism, is an inadmissible claim in favor of barter. Directly or indirectly, before 1871 bi-metalism existed everywhere. Universal and uniform bi-metalism will bring to perfection the old monetary constitution of the world.

MONETARY PACIFICATION BY THE REHABILITATION OF SILVER.*

I.—THEORY.

THERE are paying mines and there are non-paying mines. Gold may be dear, very dear, to him who extracts it, and it may be cheap, very cheap. Insignificant or ruinous, it is not the cost of production which determines the value of gold. Let a ball of pure gold weighing a thousand ounces fall from the sky: its value is written upon it before it touches the ground. Every ounce of new gold is worth exactly as much as every old ounce; but the more ounces there are, the less precious every ounce is, the smaller its purchasing-power. It is just the same with silver as with gold.

Should it be said that gold and silver are employed as money because they are precious, or should it be said that gold and silver are precious because they are employed as money? To answer this question, it is necessary to be acquainted with the facts.

* From the *Siecle*, February, 1876.

For a long time a given weight of gold was worth, with some oscillations, $15\frac{1}{2}$ times the weight of silver. For some years, however, the value of silver has been rapidly falling. At the present time 17 of silver is necessary to obtain 1 of gold. The depreciation is 10 per cent. Why this fall? Nobody is ignorant of the reason: it is that for some years the monetary employment of silver has been diminished. The fabrication of silver money has ceased in Germany; it has been restricted in France, and elsewhere.

Let us suppose that the mono-metallic gold revolution, of which the German empire has made itself the champion, everywhere succeeds in triumphing; that everywhere silver is deprived of the legal function of money; that, save the insignificant quantity employed as tokens or change, all the coined silver in circulation is called in and melted—no more monetary employment for silver—what will it be worth? More than copper, certainly, but not much more.

The same fate would befall gold, if the whim of legal mono-metalism took the other direction.

It must be admitted, then: gold and silver, although fine and splendid, are not so rare that, if people cease to employ them as money, they can retain a great value.

On whom does it depend whether one or the other metal is or is not employed as money? On the legislators of each state. But is it, then, on legislators that

the smaller or greater value of gold and silver depends ? Yes, evidently.

All mono-metallic gold legislation is favorable to the value of gold, unfavorable to the value of silver—such is the English legislation of 1816. All mono-metallic silver legislation is favorable to the value of silver, unfavorable to the value of gold—such was German legislation prior to 1871. All bi-metallic legislation is favorable to the maintenance of the relative value of the two metals according to the ratio sanctioned by it—such is the French legislation of 1803, which gives to the silver franc the weight of $15\frac{1}{2}$ francs gold. It is the effectiveness of legislation which determines the relative value of the two metals in the general market. This relative value is not stationary, because the monetary legislation of the different countries is discordant.

If discordant legislation is succeeded by an international legislation, on it alone will depend the relative value of gold and silver. If the international legislation is mono-metallic, the metal which is not money will lose so much of its value as to be no longer precious. If the international legislation is bi-metallic, the relative value of gold and silver which it recognizes will remain always and everywhere invariable. We proceed to prove it :

Let us lay down the most extreme of hypotheses: let us say that by the international legislation the relative value of the two monetary metals shall be fixed, not at

1 to $15\frac{1}{2}$ as in France, not at 1 to 10, not at 1 to 20, but at 1 to 1.

The law is everywhere promulgated. Its first effect will be to render a large number of gold-mines unremunerative, and a large number of silver-mines much more remunerative. The production of gold will undergo a diminution, the production of silver will be augmented. What will next happen?

Either the passion for gold jewels and ornaments is strong enough to seize on the totality of coined gold—and in that case gold will be worth more than silver, but there will no longer be gold money, it will be the reign of silver mono-metalism—or that passion is not powerful enough to absorb the totality of gold, and in that case a certain quantity of gold will circulate as money on an equal footing with, and with the same value, as silver. But, then, the gold jewelry, taken by weight, will not be worth more than if it were of silver; for there cannot be two golds, one worth no more than silver, the other worth more.

No help for it. The most extravagant legislation, if it is accepted by the nations, is itself irresistible: either one of the two metals will spontaneously be demonetized by private individuals, or the relative value of the two metals will remain invariable.

People are at liberty to reject bi-metalism, but it is not possible to prove that the bi-metallic thesis is unsound. Let us sum it up:

The cost of production does not settle the value of gold and silver. The value is determined by two elements—the employment and the quantity.

The monetary employment gives great value to the metal.

It is the legislator who decides whether one or the other metal, or both, shall be employed as money. On his decision depends the smaller or greater value of gold and silver.

If legislation is discordant, the relative value of the two metals may vary.

If there is a bi-metallic international legislation, the relative value of the two metals can no longer vary.

II.—APPLICATION.

It is scarcely necessary to point out that the demonetization of gold, effected spontaneously by private individuals under the bi-metallic system, 1 to 1, could in no way be anticipated under the system 1 to $15\frac{1}{2}$.

If, however, under the pressure of metallic events beyond all foresight, this spontaneous demonetization should happen? Well, we should find ourselves in full silver mono-metalism. But what a difference between that spontaneous mono-metalism and the legal mono-metalism which we are combating!

The spontaneous mono-metalism would leave us for

money the more abundant metal, whereas it is precisely this more abundant metal which the promoters of the legal mono-metalism want to have demonetized. The spontaneous mono-metalism would drive out of circulation the metal greedily sought for other purposes, whereas the legal mono-metalism intends to proscribe the metal which loses its value on ceasing to be money. The spontaneous mono-metalism, if it ever happened, would not stop the extraction either of gold or silver, and would impose no sacrifice on anybody; whereas the legal mono-metalism discourages the working of silver-mines, and begins by imposing on governments the obligation of buying all the silver money at par in order to resell it at ridiculous prices.

The bi-metallic science has no special predilection for the proportion $15\frac{1}{2}$. Strictly speaking, any proportion is admissible. But the $15\frac{1}{2}$ has this advantage, that it already exists almost everywhere on the Continent of Europe; in France, in Italy, in Belgium, in Switzerland for a long time, in Germany since the creation of the gold mark, which circulates simultaneously with the thalers.

The bi-metalism at $15\frac{1}{2}$ is conservative, therefore, in France and in Germany. Would it be revolutionary in England? In no wise; no gold-piece to melt down, and, as the only innovation, the public authorized to have struck, in silver, five-shilling pieces.

Let us suppose the quadruple alliance signed. In

England, in France, in Germany, in the United States, the public treasuries will collect the taxes and loans in bi-metallic money; in bi-metallic money they will pay the interest of the public debt, the employés, and the articles purchased. Private individuals will follow suit; they will pay each other in bi-metallic money. Gold and silver will circulate fraternally, themselves present or represented by notes. No money more varied, hence no money more convenient.

What will the miners, the seekers of gold and silver, say? "Henceforth," they will say, "the relative value of the two metals can no longer vary. So much the better. It is a risk the less in our risky occupation."

Like the tobacco-grower in the country where the crop is bought by the state at a price fixed beforehand: the grower plants for the sake of profit; he may lose, but once he plants, he is certain of the value of the tobacco harvested.

To extract 1 of gold or $15\frac{1}{2}$ of silver will be to produce the same quantity of money. Never will gold and silver miners have lived under a more advantageous legislation.

The equality of value between 1 of gold and $15\frac{1}{2}$ of silver makes a single money of the two metals. Gold becomes yellow and light silver; silver becomes white and heavy gold.

Let $15\frac{1}{2}$ be sanctioned by London, Washington,

Paris, Berlin, and in twenty-four hours silver goes up to 15 $\frac{1}{2}$, and maintains itself there forever.

At this news, all parliamentary nations, and Russia, and the Mussulmans, and Japan, so prompt to imitate us, and the Indies, subject as they are to Europeans, will hasten to adhere to the great compact which consolidates and guarantees the value of the two metals.

China alone will hold aloof from bi-metalism. It will retain its silver mono-metalism—a rude mono-metalism, for the silver is not even coined ; it circulates in ingots, which are neither of the same weight nor the same standard. So much the worse for it. As for us, we shall always be able to receive the Chinese ingot ; we shall make money with it, and with our coined silver we shall always be able to pay the Chinese.

THE BI-METALLIC FUTURE.*

THE logic of Turgot, the good sense of Franklin, the wisdom of Peel, the frankness of Bismarck, have at last met together round a green-baize table, and the monetary peace of the world has been signed. The day when this good news is announced, the bi-metallic future will open. In idea we may transport ourselves thither. Everywhere there circulate white coins and yellow coins; everywhere the white coin weighs $15\frac{1}{2}$ yellow coins. Henceforth English gold is no longer exposed to German, Dutch, and French drains: the city breathes. Henceforth the rupee has recovered its value: India is at ease; the India-Office is smiling. Henceforth silver is worth gold: the Austrian consols regain their old quotations. Henceforth Germany laughs at Herr Ludwig Bamberger's mad mono-metallic wager: all Germany freely coins gold marks and silver marks at pleasure; the Government washes its hands of the

* From the *Siecle*, March, 1876.

matter, and the thalers are saved. Henceforth silver is a legal tender at London as at New York : Nevada, California, all America, is in ecstasies. Henceforth gold and silver everywhere form one sole and joint valuating and paying specie ; the old French science is satisfied. Henceforth silver ware is rehabilitated ; it becomes again certain money, always precious, always salable, always convertible into coin ; families rejoice at it. Everything goes well.

Thunderstruck, the mono-metalists are thrown headlong down the abyss—a spectacle which makes a pendant to Michael Angelo's "Last Judgment." Charon receives the convoy in his boat and lands them on the shores of the infernal regions.

Still impenitent, the mono-metalists set themselves under the very eyes of Pluto to conspire handsomely. Avernus communicates by tellurian and pyritic routes with the gold and silver mines. The mono-metalists repair thither, take up their quarters, and for years provoke there the most terrible revolutions, followed by the most merciless reactions, in order to disturb the peaceful existence of the $15\frac{1}{2}$ which secures on the earth the monetary happiness of the human race.

Indefatigable in their lust for revenge, the underground mono-metalists put in the miners' way nuggets of gold of enormous dimensions, and so easily extracted that the cost of production is quite insignificant. The gold-diggers become Croesuses, almost

Midases. At the same moment silver, by the artifice of the mono-metalists, conceals itself from the miners, and, what is worse, the mines of mercury are almost exhausted: without mercury the working of silver-mines is very difficult. . . . In short, the proprietors of silver-mines are ruined; they are as poor as Job.

By-and-by a complete revulsion. Gold becomes undiscoverable, and silver is to be had for almost nothing, close to the surface. The effort of the subterranean mono-metalists is Titanic, and is displayed alternately in different directions, now in favor of gold production, now in favor of silver production, but always, as they believe, to the prejudice of the bi-metalism which the diplomatists have sanctioned.

Bi-metalism, however, is not at all the worse for it. In spite of so many extraordinary and varied events, the value of gold and silver always remains in the ratio of 1 to $15\frac{1}{2}$. In vain does silver abound; it cannot fall relatively to gold, for the producer has the right to have it himself converted into coin at the mint of no matter what state. Now this coin has legal currency; nobody can refuse it in payment of any debt, and the governments receive it in discharge of taxes, just as they receive the gold coin at $15\frac{1}{2}$.

To say that silver cannot fall relatively to gold, and to say that gold cannot become dearer relatively to silver, is to say one and the same thing. How, indeed, could gold rise beyond $15\frac{1}{2}$? If for his weight

of gold the digger demands more coin than it produces at the mint at the rate of $15\frac{1}{2}$, the goldsmith and jeweler will make use in their manufacture of the gold coins in circulation; and the miner, despairing of selling his gold at a higher price than that given by the mint, will be induced by the persuasive force of his own interest to have his gold coined on the legal basis of $15\frac{1}{2}$.

When legislation is everywhere alike, there is no means of exporting the monetary metal to sell it elsewhere dearer than at home— $15\frac{1}{2}$ *règne et gouverne*.

Under the universal bi-metallic system gold and silver mining may be compared to fishing. People do not catch fish-matter; they catch fish. They will not extract from mines mineral matter; they will really extract coin, yellow coin and white coin, the white heavier than the yellow, but all everywhere and always having the same value, though the production of both may be now more now less plentiful, and whatever the difference may be between the amount expended in extraction and the amount which is extracted.

As to that, there will always be paying mines, and there will always be non-paying mines.

SILVER VINDICATED.

Paper read by Mr. HENRI CERNUSCHI before the "Trade and Economy Section" of the National Social Science Association, Liverpool Meeting, October, 1876.

I.—THE SILVER CRISIS.

UP to the promulgation of the German law of the 4th of December, 1871, against silver, the production of that metal in the whole World had amounted for about ten years to £10,000,000 per annum. Since 1872 it has amounted on the average to £13,700,000 (depreciation not deducted). The increase is thus £3,700,000, and this is the extent of that immense excess of production so much talked of.

Since 1872 the annual production of gold has been £19,000,000 a year; it is therefore more by one-third than the production of silver.

In view of these figures, it is altogether impossible, even for those who have been so much afraid of the fertility of silver-mines, to attribute the depreciation

of silver to natural causes; it is wholly and exclusively due to the action of legislators.

The production of gold, which was £6,000,000 a year up to 1850, rose to £36,000,000 in 1852, yet gold was never depreciated relatively to silver. Up to 1830 the annual production of silver was thrice that of gold in value; after 1850 the fact was just the reverse, the annual production of gold becoming thrice that of silver in value; yet gold and silver never altered in relative value. The reason is that France was then bi-metallic, and that, through her, entire Europe was, indirectly at least, in the enjoyment of bi-metallism. England coined only gold, but she drew silver from France, or sent it thither in exchange for gold at the fixed rate of $15\frac{1}{2}$. Germany coined only silver, but she drew gold from France, and sent it thither in exchange for silver at the fixed rate of $15\frac{1}{2}$.

France being a market at the fixed rate of $15\frac{1}{2}$ —a market always open to all nations—the $15\frac{1}{2}$ was enforced on every nation. Neither in England nor in America, neither at Constantinople nor at Calcutta, were people willing to give more than $15\frac{1}{2}$ of silver for 1 of gold, nor more than 1 of gold for $15\frac{1}{2}$ of silver. The legal rate of France was the regulating rate of the whole world. It was in this manner that the relative value of gold and silver always remained stationary in the world—so stationary, indeed, that in English statistics the quantity of silver could always be expressed

in gold sovereigns. A gold sovereign always represented the same weight of silver.

Now, however, the old bi-metallic constitution is no longer at work in Europe. The German law, which put a stop to the coinage of silver in all the states of the empire, placed Holland, then France, and all the Continent, under the necessity of entirely suspending the fabrication of silver money. France now coins gold alone. Europe is making a mono-metallic experiment. Here is the sole cause of depreciation of silver. Nowhere does the law any longer link the value of silver with the value of gold, hence the reason why the value of silver will no longer have any fixity.

II.—THE INDIAN EXCHANGE.

Between two countries having the same metal as money, bills of exchange never cost more than the transport and coinage of the metal would do. Thus, the exchange on Paris can never fall lower in London than 25 francs, for, this limit passed, there would be no advantage in bills of exchange ; it would be cheaper to send sovereigns to the Paris mint.

The case was just the same between India and England as long as in Europe bi-metallic francs were coined. The value of the rupee in relation to sovereigns did not then run very great risk, for, at worst, people could get rupees sent to Europe, have them

coined into francs, and with those francs obtain at Paris either bills on London or gold at the rate of 15½.

This possibility of dispatching rupees to be converted into European money always sufficed to keep the Indian rate of exchange within the limits of the cost of transport and coinage of the metal.

If the German law of 1871 against silver had not come into being, Europe would still coin silver; that metal would still be common money between Europeans and Asiatics; the Anglo-Indian exchange—thanks to French bi-metalism—would still be at its old level, and the Indian Council would dispose of its bills without incurring any loss.

It is not the sale of bills on India which has made silver fall; it is the fall of silver caused by laws of proscription which has lowered the value of the bills.

Whether Indian commerce was more or less prosperous; whether the quantity of merchandise imported from India into Europe and from Europe into India was more or less considerable; whether India absorbed more or less silver—all this would in no way have affected the Anglo-Indian exchange, had not the old monetary system of the world been overturned by the mono-metallic revolution which broke out in Germany.

III.—THE SUFFERINGS.

Notwithstanding the crusade in favor of gold alone, the old mass of coined silver is still in circulation ; but the value of this silver is now only nominal, and governments cannot melt it down without incurring enormous loss. Such is the situation on the Continent.

Instead of producing £15,000,000 as formerly, the 150,000,000 rupees sold every year by the Indian Council in London in bills on India produce only £12,000,000, and it can be worse hereafter. The Indian budget is disarranged, public works are countermanded, and all administrative and financial policy in India has no longer but one aim : to recover, by no matter what reduction of expenditure, what is lost by the fall in exchange. Never was so paltry a programme imposed on a great government. The English merchandise sold in Asia and South America is paid for in silver, that is, in the metal the coinage of which in Europe is at present prohibited, and with which gold can no longer be procured at a fixed rate of exchange. To the risk incurred by the merchandise is added the risk which will be incurred by the payments.

It is no longer possible for English capital to undertake anything in India. The rupees to be gained are of too uncertain and precarious a value.

The purchasing-power of the rupee is not yet impaired in India, but it will be so by the continuous im-

portion of silver. The ruin of the rupee will be the ruin of many; and who will persuade the Hindoos that the English law cannot, if it chooses, ward off the blow struck by the German law?

For the United States to resume specie payments, it is necessary for them to rehabilitate silver, give the silver dollar the same value as the gold dollar, then accept silver at the custom-houses, and be able to pay their European bondholders in silver dollars. To enable this plan, however, to be adopted, it is first of all necessary to be sure that Europe will become bi-metallic. Without this, European creditors receiving silver dollars inconvertible into European money would undergo too serious losses. The demonetization of silver in Europe is an obstacle, therefore, to the resumption of specie payments in the United States; and they have still such difficulties to overcome in order to emancipate themselves from paper-money, that they cannot dream of taking at the same time, as France took, the bi-metallic direction of the world.

As regards the states of South America, it is evident that they will be unable either to pay their debts in Europe or to buy European merchandise if the silver yielded by their mines is not a legal tender in the Old World. Pernicious in Europe, pernicious in Asia, pernicious in America, the mono-metallic scheme has produced and can produce nothing but disaster.

IV.—INACTION.

Having only gold money at home, Englishmen have a certain disposition to speak of silver as they speak of cotton or iron, sugar or coal. Silver is being depreciated—what matters it? To-day a fall, to-morrow a rise. Natural laws must be left to act; they will bring back fine weather, and we must trust to the energy of commercial interests; it will restore the equilibrium.

Yes, if silver had only been simple merchandise this reasoning would be plausible; but silver was more than simple merchandise, it was a legal tender. All the new silver was entitled by law to be worth, and was worth, as much as the silver formerly coined; it will be no use waiting years and years: silver will never recover the value which it possessed when it was a legal tender in Europe. Bound up with gold by the French 15½, the value of silver was as stable as that of gold; it will henceforth be as unstable as that of copper.

Inaction will only aggravate the evil, and the only effective action in this matter is that of legislation. Bad laws have been passed; let there be good ones. *Lex abstrulit, lex dabit.*

V.—THE EXPEDIENTS.

“Introduce into India gold mono-metalism.” Impossible for the German empire, the expulsion of sil-

ver and the substitution of gold are still more impossible in the Indian empire.

“*Increase the Indian taxes,*” or increase the weight of the rupee, which comes to the same thing. If silver had only fallen in value to a certain point and stopped there, one might to some extent understand this proposal ; but the value of silver has become, and will always remain, variable. Will the amount of taxes or the weight of the rupee have to be modified according to the changes in the value of silver? Can the Hindoos be told, “ You shall pay us as annual taxation as many rupees as it will be necessary to sell in order to buy every year 15,000,000 gold sovereigns ? ” No ; the plan is as impolitic as it is impracticable.

“*Coin no more rupees.*” Certainly, if England is quite resolved to endure anything rather than act, those intrusted with the Indian administration may think themselves entitled to follow the example of Holland and France, which have ceased to fabricate silver money. But what consequences would follow ? What will the ingot be worth when, already rejected by Europe ; it will be rejected by the mints of Calcutta and Bombay ? What will be the worth of that enormous mass of silver ornaments worn by the Hindoos, when the conversion of them into rupees will be prohibited ? The depression of silver will no longer have hardly any limits, and all the rupees formerly coined will be, as it were, converted into bronze, so greatly will be reduced

their value on being melted down. Is this the dream of the mono-metalists—to decree the demonetization of silver, and then to see it circulate forever on the footing of a metallic assignat?

The monetary mechanism of the world has been broken down; we are in full cataclysm. Neither India nor any state can defend itself singly; either all the states will be rescued by means of a general understanding, or none will be so.

VI.—THE ONLY REMEDY: UNIVERSAL BI-METALISM.

If all the monetary laws passed in Europe since 1871 were repealed, it is beyond doubt that silver would recover its value, that the Indian exchange would return to its old level, that the £15,000,000 of Indian bills would be sold without loss. But it is not possible to reconstruct the past just as it was. Germany cannot resell gold to become again silver mono-metallic, and France cannot alone at her own risk and peril recommence coining silver. Bi-metalism can only be rehabilitated by the coöperation of all the states, India included. The mischievous mono-metalism cannot be abandoned without establishing a bi-metalism still more beneficial than the French bi-metalism—universal bi-metalism.

In coming to France to get gold coined in order to take back silver, or silver to take back gold, the nations

could not expect the operation to be entirely gratis. It was necessary to pay a small premium on the metal taken away, and to this expense was added the cost of transport and coinage. With universal bi-metalism all these expenses would be saved.

No state being any longer mono-metallic, gold and silver will everywhere circulate simultaneously. France will not be the only bi-metallic dock in the world. Who will ever think any more of offering gold to get silver, or *vice versa*, when the two metals will be everywhere a legal tender at the uniform rate of $15\frac{1}{2}$?

VII.—OBJECTIONS.

1. “The English sovereign will lose its value, its purchasing-power will be impaired, if silver is allowed to circulate as an unlimited legal tender.”

This is a mistake. If silver could really be driven out of circulation, the value of gold would increase. If silver had never been in circulation, the value of gold would have been, and would be, greater than it is. But silver has always circulated, it has always competed with the value of gold, it still circulates, and the reduction which this rivalry might impose on the value of gold, gold has already fully undergone; it has nothing more to fear. Although silver has not circulated in England, the value of English gold has never escaped the effects of the competition of silver. The proof of

this is that English gold has never been worth more than French gold, circulating side by side with silver.

With French bi-metalism the gold sovereign was worth in silver $15\frac{1}{2}$ times its weight, just the same as the franc gold. The case will be the same under universal bi-metalism. The circulation of silver in England will, therefore, strike no blow at the value of the sovereign.

2. "Breach of faith."

The English creditors have stipulated for payment in gold; if they are paid in silver they are aggrieved. This is a pitiful scruple. They would be aggrieved if a given sum in silver was worth less than the same sum in gold, but they are not if the two sums are exactly equivalent; and universal bi-metalism makes them equivalent.

England has been in turn bi-metallic, silver mono-metallic, again bi-metallic, and lastly gold mono-metallic, without drawing on herself the reproach of having at every change committed a breach of faith. Holland, Belgium, and the United States, have changed their monetary metal without incurring any blame. The French *rentier* has never troubled himself whether he would be paid in gold or silver; he has always been indifferent to the color of the metal. The English fund-holder will be so too. English interests, Indian interests, the interests of the whole world, demand this reform, which consists in declaring the coinage of silver free, even in England; and this reform will injure no-

body. To reject it there must be good reasons, not mere pretexts or pitiful scruples.

3. "Gold is the money of the rich nations; England should have gold money."

This is a prejudice. France, the United States, Holland, Belgium, have alternately had now gold money, now silver money, without being alternately more rich or less rich. India had a large amount of gold money at a time when she was poorer than at present with her silver money. Great Britain has been prosperous with gold mono-metalism, but the bi-metallic system would have insured a greater independence to her monetary market, which has always need of exchanging one metal for the other, and bi-metalism would very probably have prevented or mitigated more than one monetary crisis. People defend themselves better with two metals than with one.

4. "Silver is too heavy."

Gold also would be too heavy if one had to carry it in the pocket. But checks, bank-notes, clearings, do away with the transport of the metal, and for small payments a variety of money, "gold, silver, bank-notes," is preferable and preferred.

5. "The paying-power of gold is very stable, therefore gold money is the best."

The stability of the paying-power is in proportion to the stability of production. The production of gold is more irregular than the production of silver; the pay-

ing-power of gold therefore would *per se* be less stable than that of silver. It is the presence of silver in general circulation, and the gravitation of the French 15½, which preserved the paying-power of English sovereigns at the time of the influx of Californian and Australian gold. Irregular the production of gold, irregular the production of silver; but the two irregularities neutralize each other, and the bi-metallic production is very regular. For twenty-four years the total production of the two metals, valued at 15½, represents an almost perfectly uniform annual sum of £33,000,000. Alone the bi-metallic money is of regular production, and alone the bi-metallic money has stability of value.

6. "Every reform is costly."

Not this: the establishment of the universal 15½ involves no recoinage. All the coin in actual circulation is retained. This is the very reason why no other ratio must be substituted for the 15½. For England and India the innovation is confined to allowing the free coinage of crowns or double florins, and of gold-pieces of 10 or 20 rupees, while continuing the coinage of gold sovereigns and silver rupees.

VIII.—THE IRREVOCABILITY OF THE 15½.

Would it not be advisable to agree that the ratio 15½ might be modified after a certain period? No; either

the ratio is irrevocable, or bi-metalism cannot stand. If the French law of 1803 had provided that the weight of the franc gold might subsequently be altered, and that the weight of the franc silver alone would remain unalterable, the franc gold would have been discredited; people would have taken the precaution of contracting in franc silver. Compromised in France, French bi-metalism would have had no influence abroad, and the relative value of the two metals would nowhere have had any fixity.

But it is urged: "To guarantee the irrevocability of the $15\frac{1}{2}$, is to guarantee that two merchandises, notwithstanding the law of supply and demand, will always retain the same relative value to each other. It is to guarantee an impossibility." This is still confounding money with merchandise. To speak of merchandise, is to speak of competition, supply and demand, purchase and sale, price. To speak of money, is nothing of the kind.

Whether he produces little or much, at a profit or at a loss, no miner can ever sell his metal-money either dearer or cheaper than other miners, for the simple reason that the metal-money is not sold or bought; it is itself its price. Neither offered nor demanded, as soon as it issues from the mines the metal enters of full right into circulation, and its paying-power will be identical with that of the metal already circulating, with which it proceeds to mix itself. Thus there is no competition, no buying and selling, no price.

Such are the immunities inherent in the monetary metal. Gold and silver alike necessarily enjoy them when the monetary law is bi-metallic. Therefore, no competition is possible between the producer of gold and the producer of silver, no purchase and sale, no discount, no price between one metal and the other: Without their being offered, without their being demanded, the circulation absorbs them both at the legal par, and cannot refuse them. When the monetary law is bi-metallic, neither gold nor silver, coined or uncoined, is merchandise. *That is the secret.*

Their color is different, their weight is different, their production is different—no matter; the paying-power of the two currencies being legally identical, no depreciation can befall one metal relatively to the other; and, consequently, the relation between the weight of the gold coin and that of the silver coin never needs alteration.

Knowing that he could prescribe for perpetuity, the legislator of 1803 took good care not to say that the $15\frac{1}{2}$ should be merely provisional and subject to modification; the $15\frac{1}{2}$ was never modified, and during three-quarters of a century it governed the relative value of gold and silver in the entire world. It will appertain to the International Congress to reëstablish it, to declare it universal, and thus to give it absolute stability. This will be a great benefit for all nations.

APPENDIX.

THREE LETTERS ON THE SILVER QUESTION.

BY

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PRESIDENT OF THE INCORPORATED CHAMBER OF COMMERCE
OF LIVERPOOL.

P R E F A C E.

THE following Letters were first published in a Liverpool journal, and are reprinted here for wider circulation.

The “Silver Question” is now attracting general attention, and deservedly so, for it is one of capital importance.

The discussions that have taken place are gradually enlightening the public mind, and the time is approaching when—in the author’s judgment—an International Monetary Conference could be held with conspicuous advantage.

It is hoped that the views set forth in these Letters will commend themselves to unprejudiced thinkers, and tend toward that consummation.

S. S.

LIVERPOOL, November, 1876.

THE SILVER QUESTION.

LETTER I.

IS THE BI-METALLIC SYSTEM PRACTICABLE?

YOUR leading article of Monday judiciously calls attention to Mr. Picton's pamphlet on the silver question, and thus tends to keep alive the interest of the public in this important but abstruse subject. Will you permit me to make some remarks upon Mr. Picton's pamphlet, with the view of continuing the discussion that was commenced with such spirit at the Social Science Congress?

Mr. Picton ably and clearly expresses the view of the older English economists, and the arguments he uses are such as at one time satisfied me that our present monometallic system was the best. How I have been led to see that the dual system, as expounded by M. Cernuschi and other French writers, is the best, if generally adopted, I will try to explain in the briefest manner.

It is supposed that the metallic money in the world is pretty nearly equally divided between gold and silver. Until lately it may be said roughly that half the business

of the world was transacted in gold and half in silver, or paper founded upon them ; and as France for three-quarters of a century coined either gold or silver to an unlimited extent, making them both full legal tender, at the ratio of 1 of gold to $15\frac{1}{2}$ of silver, that ratio practically obtained all over the world. Nor was it disturbed when the discovery of the Californian and Australian mines suddenly increased the yield of gold from six to thirty millions sterling annually, without any change in the production of silver. France was, in fact, the regulator of the world, and her legal ratio was practically adopted by all other nations that used silver money. The first blow to this convenient arrangement was struck by Germany resolving to demonetize silver and adopt gold as its sole standard ; but even then there was but little depreciation so long as France continued to coin on the old ratio. It was only when she, fearing the enormous influx of German silver, in self-defense practically ceased to coin that metal, and carried along with her the Latin Union of states, that the great depreciation set in.

The real cause of the fall in silver is neither the increased production nor the diminished demand for India, but the demonetization policy of Europe forced on by Germany. Had the monetary state of Europe remained the same as before the Franco-German War, and the mints been open to coin silver at the old ratio of $15\frac{1}{2}$ to 1, there would have been no deviation from that ratio to-day, and silver would have been quoted about 5s. per ounce. The increase in the production of silver of late years has been

from—say ten millions annually to sixteen millions sterling, and that would have no more affected the relative value of the metals than did the increase in the production of gold in 1848-'50 from six millions to thirty millions, which also had no effect in lowering the relative value of gold.

This brings us to the kernel of the whole question : *Can legislation fix a definite ratio between gold and silver, or can it not?* Our opponents say it cannot, any more than it can fix a definite ratio between corn and cotton. They say that the cost of production must determine the market price of the respective metals, and that all legislative interference is mischievous and futile. This would be perfectly true if the precious metals were not used as money. Could we conceive that we were in a state of barter, and that gold and silver were used simply for purposes of ornament, the law would of course be unable to assign them a fixed relative value. It is, moreover, very unlikely that either of them would bear nearly as high a value as they do now, seeing that the chief use of these metals is for money, and even their subordinate use for ornaments arises partly from the factitious distinction they have acquired on account of their higher use for money. An entirely new set of laws is introduced from the time that governments elevate either or both metals to the rank of money. First of all, a vastly increased use is given to the metal or metals so used, and along with this increased use a much higher value than would otherwise have prevailed.

All this, however, it may be said, is mere abstract reasoning. The precious metals have always been used for money, and, no doubt, were designed to be so used, and the only point to be discussed is whether legislation should leave their respective value to be settled by the laws of supply and demand, or try to establish a fixed ratio between them. *I hold that it is better for the world at large to retain them both as full legal-tender money at a fixed ratio, and that it is possible to do so by common consent.*

The latter proposition I will try to prove first. Suppose that in England all debts could legally be discharged either by gold or silver at the rate of 1 of gold or $15\frac{1}{2}$ of silver, or by bank-notes payable in either at the option of the bank ; and suppose, further, that the mint would receive either gold or silver for coinage to an unlimited extent, giving legal-tender notes of equal value for 1 of gold or $15\frac{1}{2}$ of silver : I say that in England it would be impossible to have fluctuations in the relative value of gold and silver. Neither would there be a temptation to pay in the cheaper metal, for there would be neither cheap nor dear, any more than there is now between gold and bank-notes. Money is of no use except to make payments, and if no person could settle debts by silver so as to gain any advantage as compared with settling them in gold, why should he prefer to pay in silver ? Payment would in fact be made as now by bank-notes, checks, etc., and the only difference would be, that the issuing banks would hold silver as well as gold, for each metal would be alike valuable to them. It is clear, however,

that such a system, to work safely, would require the consent of adjacent nations. If silver in France and Germany was valued at 18 to 1, while in England it was $15\frac{1}{2}$ to 1, gold would leave England, where it exchanged for only $15\frac{1}{2}$ of silver, and flow to countries where it exchanged for 18 of silver. England would become a country of silver currency, and France and Germany of gold. This is just the position in which France finds herself at present, and is, therefore, compelled to discontinue coining silver.

It is quite clear, in order to have a bi-metallic system permanently established, that a convention of leading nations is required to fix a common ratio in which they will all coin money and pay their debts. A more proper subject for an international agreement could not be conceived. All nations benefit by stability in monetary matters. Were such an agreement entered into, and all the leading commercial nations undertook to coin the precious metals and make them full legal tender, on the plan I have supposed for England, it would be as impossible for gold and silver to fluctuate in relative value all through those countries, and, indeed, through the world, as it would be in Great Britain on the hypothesis I assumed above. And the greater or less production of the respective metals would have nothing to do with it, just as the sudden jump in the gold production from £6,000,000 to £30,000,000 in 1848-'50 did not depreciate gold compared with silver, because the bi-metallic system then ruled on the Continent; neither would a jump in the

production of silver from £16,000,000 to £30,000,000 or £40,000,000, were such to happen, if the bi-metallic system were again adopted.

What the law cannot fix is *the purchasing-power of the precious metals in relation to other commodities*. Suppose, for argument's sake, that the joint production of gold and silver, which is now about £40,000,000 annually, were to become £400,000,000, we would find a rapid rise in money prices—in other words, a diminution in the real value or purchasing-power of money ; but what the law can do, is to prevent fluctuations in value as between gold and silver by making them both legal tender at a definite ratio. If, however, the law makes gold only legal tender, silver, of course, would fluctuate like other rare metals, such as platinum. In the same way, if silver was made sole legal tender, gold would fluctuate like other rare metals. If, for instance, Chevalier's proposal to demonetize gold, made some twenty years ago, had been generally adopted, we should have seen far more violent fluctuations in the market price of gold measured by silver than we have lately seen in the market price of silver measured by gold. Now, as stability of value is one of the most necessary qualities of money, I hold that it is better to confine fluctuations to the mass of gold and silver combined than to let each metal fluctuate separately. Gold alone has varied within this century from an annual production of £3,000,000 to £30,000,000, or tenfold, but gold and silver combined have only varied from about £10,000,000 to £40,000,000, or fourfold ; hence the joint

metal forms a more stable mass than gold alone. It is like a kite with a heavy tail to it, which prevents it from swaying to and fro; whereas gold alone is like a kite without a tail, which obeys every gust more readily. I must reserve for another letter some further remarks on the subject.

LETTER II.

IS THE BI-METALLIC SYSTEM DESIRABLE?

IN my former letter I dealt chiefly with the question whether or not it was possible for nations by common consent to establish a fixed ratio of value between gold and silver, and tried to show that it was perfectly practicable, provided that both metals were made full legal tender for the payment of debts at the ratio fixed by law, whether that be $15\frac{1}{2}$ of silver to 1 of gold, or any other.

I now wish briefly to point out some of the advantages which would result from the adoption of the bi-metallic system as thus defined.

1. It would greatly facilitate transactions between countries using a gold and countries using a silver standard, by reducing their money, as it were, to a common denominator. For three-quarters of a century the silver rupee was practically worth the tenth part of a sovereign, the silver franc the twenty-fifth part, and all other leading silver coins some other fixed proportion, and the reason

of this stability was that France coined either gold or silver to an unlimited extent at the ratio of 1 to 15 $\frac{1}{2}$. The whole world benefited by the regulating influence of her bi-metallic system ; hence it happened that when the extraordinary gold discoveries of 1848-'50 increased the yield of gold fivefold, there was no change in the relative value of the precious metals, and commerce went on all over the world undisturbed by the change.

The same happy result would flow from the readoption of the bi-metallic system ; the annoyance, inconvenience, and loss to merchants trading between countries using a gold and a silver standard would be at an end. We should no longer see the rupee worth at one time the tenth of a sovereign, at another time the thirteenth part, and perhaps at some future time the twentieth part. We would preserve the incalculable advantage for mankind of speaking as it were one monetary language instead of a babel of tongues. But this is the least advantage. Commerce can no doubt overleap the barriers of fluctuating exchanges, and our merchants, warned by the past, can protect themselves tolerably well in the future against fluctuations in silver, as they have done against fluctuations in the convertible currencies of America, Russia, and other countries ; business will go on in spite of these difficulties, just as people would continue to cross the Atlantic if steam-ships were abolished, but with less comfort and more risk.

2. A much greater advantage would be the gain to the cause of honesty and fair play as between man and

man. Let me explain what I mean. During the seventy years of this century when gold and silver remained practically at the ratio of 1 to $15\frac{1}{2}$, an immense pile of national debts, railway bonds, private mortgages, and other obligations (public and private), has been reared. The greater part of our national debt has been contracted in that period, with interest payable in gold. The United States debt has been piled up also, with interest payable in gold; the debt of France, with interest payable in either gold or silver; the debts of Russia, Austria, and Italy, with interest payable part in gold and part in silver; the rupee debt of India, with interest payable in silver, and so on with the minor states. These engagements represent thousands of millions sterling, and constitute the chief investment of the savings of a large portion of mankind, including the property of multitudes of widows and orphans. The same may be said of the borrowings of railway and other private corporations, whose interest is payable throughout these countries in one or other metal, or in both.

The innumerable multitude of people who lent this money did so on the faith that the standard in which they were paid would not be tampered with by violent monetary changes. They may have known little of monetary laws, but they knew from experience that gold and silver were alike valuable at the ratio of 1 to $15\frac{1}{2}$, which had ruled during their lives and the lives of their fathers, and it was the implicit faith in this fixity of value which induced English capitalists to lend

£100,000,000 to the Indian Government, with interest to be paid in rupees at the rate of 4 or 5 per cent., and vast sums to other countries, also to be paid in silver. The same confidence made the French peasant empty his old stockings of silver five-franc pieces and gold napoleons and lend them to his Government, and made the thrifty German invest much of his savings in Austrian silver-paying securities. On the other hand, Russia and other foreign countries, notably the South American republics, borrowed much money in London, engaging to pay the interest in gold, though their own revenue was collected in silver, because they expected (as past experience had taught them) that they could procure the gold to pay the interest by exchanging for it $15\frac{1}{2}$ times the weight of silver.

In short, a large network of borrowing and lending has been drawn over the entire civilized world, based upon the belief that either metal was alike valuable at the ratio which had so long prevailed.

Any one can see at a glance what an evil it would be to have gold and silver, as it were, divorced from each other and following incalculable laws of relative value in future, like the unknown motions of comets. At present all the nations and individuals who have contracted to pay silver are saving much of their legitimate outlay. The unfortunate recipients are mulcted out of their just dues. Those, again, who have engaged to pay gold will gradually find, by the operation of another law (which I have not yet referred to), that their obligations will get

heavier and heavier, and that their creditors will reap an undue advantage.

It is as if all contracts for the sale of land had been made by a yard-measure throughout the world, but in some countries the yard was divided into three feet and in others into thirty-six inches. For a long time these measurements coincided, but at last, by some freak of fortune, the inch came to be shortened by a quarter, and so it came to pass that people in one country who had bought land in another expressed in the common term "yard," found that they were getting twenty-five per cent. less than they had paid for. The analogy would be closer if we could suppose that a great portion of the earth's surface had been so transferred during a long period in which payment was deferred, and that when the buyers had paid their money and taken up the titles, they suddenly found that by a trick of words they had been defrauded out of a quarter of what they had paid for and believed that they would get.

Of course this parallel is imperfect, for we know well that no willful monetary fraud has been practised by any country ; but the effects of the revolution we are passing through are very similar to what we have described, and it must be apparent to any one who loves to see justice and fair play among mankind, that if this wrong can be obviated, it is worth attempting, and ought to be attempted.

3. But, thirdly, another weighty consideration is this : the countries using silver money — that is, fully half

the world—will find that the inconveniences are so great (provided no remedy is applied) that they will be driven ultimately one after another to demonetize silver and use gold exclusively as their standard. The result of that will be that silver, instead of being worth, as at present, 4s. 6d. per ounce, say about $17\frac{1}{2}$ to 1 of gold, may drop to 2s. per ounce, or some other figure so low as practically to beggar all nations that have borrowed in silver and have to pay in gold, and virtually confiscate the property of all who have lent their money to nations or individuals for payment of interest in silver.

No doubt, if such a state of things were to happen, some countries would have to pass into liquidation and make a composition with their creditors, and ultimately matters would settle down everywhere, after excessive suffering and confusion, into a universal system of gold payments ; but the necessary consequence would be, that the metallic basis on which the business of the world was done would be immensely reduced ; it would be as if the mines were shut up for several years. Instead of say 1,400,000,000 of gold and silver to do the business of exchange, there would be 700,000,000 or 800,000,000 of gold, and a limited amount of silver as small change. Money values would fall greatly ; national debts like our own would press much more heavily, and a period of suffering and contraction of business would ensue similar to what the United States has experienced on coming painfully back from inflated paper toward specie payments.

No doubt at least the process would be accomplished,

and, after a century or so, the world could trade as well on gold alone as on gold and silver combined. But why have the intermediate chaos if it can be avoided? My contention is, that it can be avoided by an international monetary convention between the four leading commercial nations—perhaps between England and France alone; and in this convention all would be gainers and none losers, for, in the long-run, all the best interests either of men or nations are served by keeping their obligations inviolate.

LETTER III.

“FREE-TRADE” OBJECTIONS ANSWERED.

If not intruding too much upon your space, I should like to offer a few more remarks upon the silver question.

There cannot be a doubt that at first sight, and before the question is fully studied, the bi-metallic system, as advocated by M. Cernuschi, Mr. Williamson, and others, appears to be opposed to the principles of “free trade,” and to ignore the laws of “supply and demand.” This generation of Englishmen has been trained up to believe in free trade so implicitly, that a presumption is raised against any scheme which involves legislative interposition.

It appears at the first blush that gold and silver, being articles produced by human labor, must have their respective value determined by the same laws as cotton,

or corn, or coal, or iron. It would be folly to ignore the strength of the prejudice we have to encounter from the commercial and economical training of the people of this country. It all the more devolves on us to show how far those "laws of supply and demand" bear upon the question at issue, and to point out clearly where they hold good and where they fail to be applicable. Now it is an undoubted fact, that the price of all articles intended for consumption is determined by the relation of supply to demand at any particular time, and over longer periods by the cost of production. The price of cotton or sugar at the moment is determined by the state of the market, but ultimately and in the long-run by the cost of producing them. Every one knows that if either of them fell for some years much below the cost of growing it, production would fall off, and the price rise correspondingly. The connection between the two is so palpable that every one can perceive it. This law, however, acts with immensely greater force upon articles of trade than upon the precious metals, for the simple reason that most crops grown in the world are consumed within the same year, or at most the following one, and pretty nearly the same may be said of manufactured goods. The world's production of all consumable articles is but a few months ahead of the world's consumption; hence any falling off in production quickly brings on scarcity and such high prices as to stimulate production again.

It is altogether different with the precious metals. Their durability is so great that probably a considerable

proportion of all the gold and silver that has been extracted from the bowels of the earth since the days of Abraham is still in existence either as money or ornaments, and the addition made annually to this mass by the yield from the mines is so small that it hardly affects the bulk appreciably ; hence it happens that long periods of small production, such as the last century and the early part of this, scarcely increased the purchasing-power—that is, the real value of the precious metals. Neither did the extraordinary discoveries of Australia and California, which increased the gold production fivefold, appreciably lower the purchasing-power of money for several years ; and even yet economists dispute whether it has been lowered so much as 15 or 20 per cent. in consequence of the great production of gold for twenty-eight years past.

These remarks are made to show how little the “cost of production” has to do with the value of the precious metals at any given time, and how the phrases that are derived from commercial experience are misleading when applied to monetary matters. It would almost seem as if it were the design of the Creator to supply the precious metals in such quantities that their value should be more fixed and stable than that of anything else ; and, with the experience of 4,000 years to guide us, we may fairly conclude that the future has no monetary cataclysm in store for us, to upset well-devised schemes based upon the comparative stability in value of the precious metals.

All this, however, is merely preliminary to what I have to say as to the value of gold and silver in relation to one

another. The crucial point of the whole question is, *Can legislation fix a ratio between them, or does the cost of production fix it, irrespective of all legislation?* Our opponents say that gold will fall in relation to silver when produced more cheaply, and that silver will fall in relation to gold when produced more cheaply—in spite of all laws of mankind to the contrary. I marvel that none of them attempt to explain why it was that in 1848-'50, when the production of gold increased all at once fivefold, and its cost of production, perhaps, fell nearly as much, *it did not vary in value as compared with silver*. Here was a crucial test of the soundness of their theories; the very thing happened which should, according to their view, have shattered all bi-metallic theories. There never was an instance before of a more remarkable change in the cost of production and the quantity produced of one metal compared with the other.

We all know what would have happened if the production of wool had suddenly increased fivefold, while that of cotton remained unchanged. Wool, instead of being worth more than double the price of cotton, would for some time have been cheaper, just as cotton during the American war, from extreme scarcity, became worth more than wool for a short time. Why did we not see gold, in place of exchanging for $15\frac{1}{2}$ times its weight of silver, as in 1800-'48, suddenly fall till it only fetched eight or ten times its weight of silver? The cost of producing silver and the quantity annually produced remained about the same during 1850-'60 that it was during 1840-'50;

but gold was produced at the rate of 30,000,000 annually in place of 6,000,000, and during the first flush of gold-mining the cost of producing was vastly less than it had been for centuries before.

Is it not present to the recollection of most people what fortunes the first miners in Australia and California made? We would not be surprised if statistics could prove that in the first year or two of the gold discoveries the average takings of each miner were £1 per day, whereas probably the average earning in all the gold and silver mines of the world, up till 1848, was not more than 5s. per day; that is, the cost of producing gold, as measured by the wages of labor, fell to one-fourth of what it was before, while that of silver remained unchanged. We could not imagine any set of circumstances more elaborately contrived to bring out into bold relief the so-called "cost-of-production" theory in relation to the precious metals.

All the arguments of our opponents would go to prove that silver must have mounted up quickly to 10s. per ounce in the London market; but, strange to say, nothing of the kind happened! The price of silver was not affected; it kept exchanging at the old ratio of 15½ to 1 of gold, just as if the gold-mines had never been discovered! How is this to be accounted for? We have not heard a word of explanation from our opponents. Surely the best test of any theory is its power of explaining phenomena. Did not astronomers find out the falseness of the Ptolemaic theory by its inability to explain some of the movements of the heavenly bodies? Would



not the calculations of modern astronomers be discredited if eclipses did not tally with their predictions? In the same way, the monetary theory which accounts for all fluctuations of gold and silver simply by the respective cost of producing each metal, utterly breaks down at the very point where, if true, it should be infallibly demonstrated. I repeat that the true and the only explanation is, that the bi-metallic system of France then in full force and followed more or less on the Continent, whereby gold and silver could be coined to an unlimited extent and made full legal tender at the ratio of 1 to $15\frac{1}{2}$, prevented either metal in any part of the world fetching more or less than that ratio. It was nonsense to suppose that a gold-miner in Australia would exchange his gold anywhere in the world for ten or twelve times its weight of silver, when by coining it in France it exchanged for $15\frac{1}{2}$ of silver. The bi-metallic system of France was, in fact, the monetary safety-valve of the world. It prevented gold sinking indefinitely in relation to silver, and thus producing a far wider range of disturbance than the fall in silver has produced now.

I hold, therefore, that the proposition is established beyond controversy, *that legislation can fix a definite ratio between gold and silver—notwithstanding great fluctuations in the relative supply of either metal, and great changes in their cost of production.* There can be no doubt that the leading commercial nations combined, probably even France and England alone, can do for silver now what France and some other European states

did for gold in 1848-'50. There can be no reasonable doubt that bi-metalism can deal in 1876 with a twofold production of silver as well as it did with a fivefold production of gold in 1848-'50. The proof seems to me indisputable, and our opponents must either grapple with it in place of dealing with vague generalities, or admit that they have not probed the subject to the bottom.

THE END.

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